

CHAPTER 13. THE WIDE VIEW

13.1 Some Final Data from the Coastal Survey

As was particularly evident at sites south of Pakkala Toa, the immediately pre-Islamic burial grounds along the coast were reportedly dominated by east-west extended skeletons, quite often associated with duni (log coffins). A summary of key sites, abstracted from Bulbeck (in prep. b), further clarifies the case.

Jamarang Tua (Takalar 11) and Mandallek Toa (Gowa 20) seated the two northern Polombangkeng polities (4.5). Both sites include large pre-Islamic burial grounds. Jamarang (Figure 13-1) has produced an abundance of "early" and "Ming" ceramics, and informants explained that only the ban on looting stopped them recovering more. Although no intact bones were reported, degraded duni were apparently found at approximately one in 15 antique-bearing spots, in association with far more wares than was usually the case. Mandallek Toa (Figure 13-2) includes a looted area, extending from zone 2 westwards, where an abundance of celadons and Ming period wares were reportedly recovered in association with east-west directed skeletons. No duni were reported, but this could be partly due to lack of preservation in the slightly alkaline soils (pH 7½), as would also account for the reported recovery of human bone.

The other old, local political centre in today's Kecamatan Galesong Utara is Campagaya Lama (Takalar 14), the seat of the government of Galesong between c.1600 and 1635 (4.7). As this juncture corresponds to when Mandallek appears not to have supported a karaengship (4.5.2), and Mandallek Toa sits on Campagaya's back door (Figure 11-4a), we may reasonably link the rise of local rule in Campagaya with Mandallek's decline (Figure 13-11). The Islamic burial ground at Campagaya Lama, where the Galesong personages were buried, was preceded by a pre-Islamic burial ground a short distance to the west (Figure 13-3). Reports describe east-west oriented skeletons associated mainly with Ming-period wares, and bronze and celadons too, but no duni.

Kota Galesong (Figure E-4) holds a most impressive concentration of archaeological remains dating after the relocation of Galesong's rule here in 1635. SSPHAP's survey also documented six discrete pre-Islamic burial grounds, and a proportionately greater presence of 15th century than 16th century remains, suggesting that Galesong had flourished as a local port before its subjugation by Tumapakrisik Kallona (Figure 4-3). Of particular interest, Bayoa kampung at the rivermouth includes a place where two large duni and a small one had reportedly been found, all directed towards the sea (i.e. oriented east-west). Remains kept at the local "Culture and Education" office included one of the large duni (Photo 13-1):¹ human bones which can be ascribed to a minimum of two and a likely maximum of three individuals (Table 13-1; Photos 13-4 to 13-6); and 15th to 16th/17th century tradewares (Photos 13-10 to 13-13).² The reported and collected items can all be ascribed to three people buried in the duni, except that the tradeware pieces could represent at least a century (i.e. the late 15th to late 16th centuries), which might suggest that more than three people had originally been buried. I did not collect any samples for dating and so I cannot offer a more definite interpretation.

A duni was also found at Benteng Sanrabone at "Bayoa" (Figure E-3), in this case named after the revered, east-west directed grave of "Karaeng Lolo Bayo", the "Bajau king washed away at sea" (Photo 13-7). The duni, which was oriented at 85° from north, presented only a very partial exposure (Photo 13-3), and the wood sample we collected for dating must have come from the inside top. On a later occasion, after Suaka excavated the duni, I counted 80 tree rings from where the sample would have been taken, to the outermost extant tree ring (Photo 13-2). The sample ("Sanrabone 1") returned a date of 780 ± 80 BP (ANU-5564), which calibrates to 690 BP with a single S.D. range of 670-770 BP (cf. Stuver and Pearson, 1986:811). Allowance for the 80 countable tree rings brings

¹ The duni has since been relocated to Suaka's museum at Benteng Ujung Pandang.

² The Qing BW fragment is so small (Photo 13-13) that its association could well be accidental.

TABLE 13-1. BONES REPORTEDLY FOUND WITH THE GALESONG DUNI

Cranial Skeleton

Three matching and two other posterior neurocranial fragments, probably from the one individual with completely unclosed sagittal and lambdoid sutures, and a very slight transverse occipital torus. Probably less than 20 years old at death (cf. Brothwell, 1981:43).

Truncal skeleton

One clavicle representing a sub-adult.
Two rib fragments.
Three vertebral discs.
Three pelvis fragments, one with a wide greater sciatic notch which suggests a female.

Arms

Isolated humerus head, possible representing a sub-adult.
Matching pair of gracile humerus shafts (female or sub-adult).
Matching pair of distal humerus fragments which do not join the shafts.
One proximal ulna fragment.
(Probably) one right radius represented by proximal and distal fragments.
Three metatarsal fragments.

Legs

Two matching pairs of femora.
One pair: semi-complete; possibly male as rugged.
Second pair: medial fragments; female or sub-adult as gracile.
Matching pair of medial tibia fragments.
One medial fibula fragment.

N.B. The bones represent a minimum of two individuals, an adult male and a sub-adult or teenage female. However, the bones could easily represent three individuals - an adult male, an adult female, and a sub-adult - given the spotty representation of any possibly represented individual.

the date forward to 610 BP (590-690 BP), i.e. 1340 AD with a single S.D. range of 1260 to 1360 AD.

This date precedes the great bulk of Sanrabone's archaeological remains. Very few "early" tradewares were recorded, and none at the burial ground with the duni.

Benteng Sanrabone was not built before 1668, when

Hasanuddin's son who later became Gowa's Sultan Abdul Jalil was installed as Sanrabone's raja (E.1.3). Even the origins of Sanrabone's royalty cannot be dated before the mid-15th century (Figure 4-10).

There are ways of accommodating the discrepancy, such as

suggesting that the duni had had a long prior use as a boat, or that it had been maintained as a keramat object before its use as a coffin. However, it is difficult to ignore the

spatial association with the local culture hero Kg Lolo Bayo, particularly as "Karaeng Bayo" apparently married Gowa's

Tomanung at the end of the 13th century (Figure 2-2) and so would have probably died in the early 14th century. To my

knowledge there is no other place associated with Kg Bayo in the whole southwest coastal plain, so it would be hard to imagine what other sort of evidence could possibly better

confirm Gowa's origin story.³ In any case, we certainly have strong evidence that burials in duni occurred at a place

called Bayoa (later, Sanrabone) by at least the 14th century, at which time Bayoa could well have been located on the mouth of the main river draining the Gowa highlands (Figure 11-1d).

Probably the earliest directly dated remains collected

during SSPHAP's survey come from Talaborong (Gowa 24) a short distance inland from Mandaliek Toa. Apart from a couple of

pieces which could date to the 15th century, and some much

later pieces, Talaborong's surface tradewares were dominated by coarse stonewares (15% of the total), early monochromes

and early whitewares (Photos 13-15 and 13-16), including

³ Hence it may be superfluous to treat the story as an allegory of deeper realities, as done by Reid (1983a), when the story could be merely true. If it is to be treated as a fable, then its inclusion in SG is most parsimoniously associated with Gowa's enslavement of Sanrabone during Tumapakrisik Kallona's reign (when local literacy was founded), or even with Gowa's absorption of the Sanrabone throne in 1668.

examples of the "bowls with thickened rims" which Lam (1985) dates to the 11th-12th centuries. I collected the surface earthenwares which comprised mainly sherds from jars and boxes. Of particular interest, four of the zones produced 34 human bone fragments weighing 86 gm (Table 13-2). These were submitted for radiocarbon dating and produced a date on the apatite fraction of 920 ± 170 BP (ANU-5924), which calibrates to 795, 830, 855, 905 BP with a single S.D. range of 680-980 BP (cf. Stuiver and Pearson, 1986:811). Thus the age of the bone, between the 11th and 13th-14th centuries AD, corresponds perfectly with the age of the main tradeware assemblage.

The bone fragments constitute a typical assemblage of cremated bone in their colour, which varies from white to pink and brown shades to dark grey, and in their size which generally ranges between 10 and 30 cm (Table 13-2). The absence of teeth is also typical of cremated remains (Gejvall, 1969). More specifically, the fragments sometimes show transverse fracture lines, irregular lengthwise splitting and warping, indicating that they were cremated in the flesh (Photos 13-8 and 13-9). They do not show the cracking and longitudinal splitting of dry bones cremated after maceration (Ubelaker, 1984:35-36).

Talaborong joins with three other sites not described here, Matoanging (near Mandallek Tua), Likuloe (see Figure 5-1) and Kalukuang (see Figure 5-2). At these sites, reports of burned human bone fragments found in jars can be confidently dated to the age of the Talaborong remains or earlier (Bulbeck, in prep. b). Direct and indirect evidence of the same practice was observed at the middle Jeknekberang sites Saukang Boe, Songkolo Asli and Bontona Songkolo, where it can probably be dated between the 14th and 17th centuries (Chapter 9). At least in the case of Talaborong, cremation of the corpse appears to have been involved, followed by secondary burial of the "ashes" in jars.

TABLE 13-2. HUMAN BONE FRAGMENTS COLLECTED AT TALABORONG (RADIOCARBON SAMPLE "GOWA 24")

Specimen No.	Identification	Length (mm)	Breadth (mm)	Thick- ness (mm)	Outer bone colour	Inner bone colour	Weight
G.24.1.1	Fibula midshaft (male?)	105	16	11	7.5YR 6/2	10YR 8/2	16 gm
G.24.1.2	Vertebral disc fragment	13	7	6	10YR 8/2	10YR 8/2	1 gm
G.24.1.3	Radius/ulna	24	10	3.5	7.5YR 8/2	7.5YR 7/4	2 gm
G.24.1.4	Mandibular corpus between M ₁ and C sockets (male?)	21	15	10	10YR 8/1	10YR 8/1	2 gm
G.24.1.5	Parietal fragment with unused sagittal suture	27	15	5	10YR 8/1	10YR 3/1	3 gm
G.24.2.1	Radius (?)	20	9	4	5YR 8/1	5YR 8/1	5 gm
G.24.2.2	Basicranium	18	14	6	7.5YR 8/2	7.5YR 8/2	2 gm
G.24.2.3	Humerus (?)	13	12	5	5Y 8/1	5Y 8/1	2 gm
G.24.2.4	Pelvic girdle (?)	32	13	6	5Y 8/1	5Y 8/1	3 gm
G.24.2.5	Pelvic girdle	16	8	4	10YR 8/2	N 4/-	1 gm
G.24.2.6	Fibula	33	13	4	10YR 7/1	10YR 8/1	2 gm
G.24.2.7	Humerus (?)	12	9	5	10YR 7/1	N 6/-	1 gm
G.24.2.8	Unidentified	14	10	2	10YR 7/1	10YR 7/2	1 gm
G.24.2.9	Metacarpal/metatarsal	16	6	2	10YR 7/1	10YR 7/2	1 gm
G.24.2.24	Radius/ulna/carpal	20	9	5	5YR 8/1	5YR 8/1	1 gm
G.24.3.1	Calvarium	19	16	6	10YR 8/1	10YR 8/1	3 gm
G.24.3.2	Humerus/ulna	24	15	5.5	7.5YR 7/2	7.5YR 7/4	4 gm
G.24.3.3	Metacarpal/metatarsal	19	5.5	3	7.5YR 8/2	7.5YR 8/2	1 gm
G.24.3.4	Occipital bone (male?)	39	28	10	N 8/-	N 8/-	6 gm
G.24.3.5	Calvarial (unused suture)	22	17	6	N 8/-	5YR 4/6	2 gm
G.24.3.6	Humerus/ulna	9	7	4	7.5YR 7/2	7.5YR 7/2	1 gm

TABLE 13-2. HUMAN BONE FRAGMENTS COLLECTED AT TALABORONG (CONT.)

Specimen No.	Identification	Length (mm)	Breadth (mm)	Thick- ness (mm)	Outer bone colour	Inner bone colour	Weight
G.24.6.1	Calvarial	17	12	3.5	N 8/-	5YR 3/3	1 gm
G.24.6.2	Humerus midschaft	45	14.5	5	10YR 8/1	5YR 3/4	8 gm
G.24.6.3	Radius/ulna	36	10	3	10YR 7/1	5YR 5/6	2 gm
G.24.6.4	Humerus midshaft	17	11.5	6	5YR 7/2	5YR 5/6	4 gm
G.24.6.5	Radius/ulna	20	7	2	10YR 8/1	5YR 4/6	1 gm
G.24.6.6	Metatarsal/metacarpal	16	10	2	7.5YR 7/2	5YR 5/6	1 gm
G.24.6.7	Femur/humerus/tibia	10	7	4	5Y 8/1	5YR 4/6	1 gm
G.24.6.8	Calvarial	13	13	3	5YR 8/2	5YR 3/3	1 gm
G.24.6.9	Femur/humerus/tibia	17	11	3.5	5YR 8/1	5YR 4/6	1 gm
G.24.6.10	Tibia (?)	16	9.5	6.5	7.5YR 8/2	5YR 4/6	2 gm
G.24.6.11	Tibia (?)	11	7	5.5	10YR 8/2	5YR 3/2	1 gm
G.24.6.12	Unidentified	12	9.5	4	5YR 7/1	5YR 7/1	1 gm
G.24.6.13	Long bone	9	9	2.5	7.5YR 8/1	7.5YR 4/6	1 gm
G.24.6.14	Tibia (?)	9	9	3	5YR 8/1	5YR 4/4	1 gm

	Zone 1		Zone 2		Zone 3		Zone 6		Total	
	Number	Weight	Number	Weight	Number	Weight	Number	Weight	Number	Weight
Cranial Skeleton	2	5 gm	1	2 gm	3	11 gm	2	2 gm	8	20 gm
Long Bones	2	18 gm	5	11 gm	2	5 gm	10	22 gm	19	56 gm
Extremities	-		1	1 gm	1	1 gm	1	1 gm	3	3 gm
Other/unidentified	1	1 gm	3	5 gm	-		1	1 gm	5	7 gm
Total	5	24 gm	10	19 gm	5	17 gm	14	26 gm	34	86 gm

N.B. Some of the bone fragments with the same coloured surface inside and outside had grey cores. The minimum number of represented individuals is 1, but very probably a larger number is involved.

TABLE 13-3. MAIN PREHISTORIC BURIAL SITES OF THE SOUTH SULAWESI LOWLANDS

Site	Dating Material	Date (one S.D. ranges in brackets)	Other Main Associations	Inferred Type of Disposal
Leang Burung 1, Trench B	Partly fossilised human bone, apatite fraction 4610±220 BP (ANU-6175)	5325 BP (4980-5595 BP)	Aceramic Toalean	Disturbed primary inhumation
Leang Burung 1, Trench A	Burned femur fragment: collagen fraction 2260±90 BP (ANU-6173); apatite fraction 1660±190 BP (ANU-6173)	2330 BP (2150-2350 BP); 1550 BP (1350-1820 BP)	Earthenware sherds; Toalean stone artefacts	Macerated bones cremated when dry and secondarily disposed
Leang Burung 1, Trench A	Burned femur fragment: collagen fraction 1660±190 BP (ANU-6174); apatite fraction 640±240 BP (ANU-6174)	1550 BP (1350-1820 BP); 580, 650 BP (490-790 BP)	Earthenware sherds; Toalean stone artefacts	Macerated bones cremated when dry and secondarily disposed
Leang Burung 1, Trench A	Unburned human bone, collagen fraction 1160±200 BP (ANU-6172)	1065 BP (930-1290 BP)	Earthenware sherds; flaked stone artefacts	Disturbed secondary disposal of uncremated (?) bones
Ulu Leang 2	Glass beads, copper bead, iron fragments	c.1700-c.2000 BP	Unburned human bones; earthenwares	Secondary disposal in jars; uncremated
Leang Codong, Soppong	Carnelian, stone beads; bronze leaf; iron point	c.1000-c.2000 BP	Unburned human bone; bone, stone, shell artefacts	Secondary disposal not

TABLE 13-4. MAIN PROTOHISTORIC/HISTORICAL BUGIS AND MAKASSAR SECONDARY BURIAL SITES

Site	Dating Material	Date (one S.D. ranges in brackets)	Other Main Associations	Inferred Type of Disposal
Sabbang, Luwu	Earthen- and tradeware sherds, iron spearheads	c.1000 BP (?)	Stone bark pounder	Urnfield; secondarily disposed remains
Leang Pette Kere, near entrance	Dark-surfaced incised earthenware sherds	c.1000 BP (??)	Burned human bones	Primary cremation; secondary burial of remains in jars
Talaborong (Gowa 24)	Burned human bone, apatite fraction 920 $\pm$ 170 BP (ANU-5924)	795,830,855,905 BP (680-980 BP)	Vietnamese and Chinese pots, Song/Yuan age	Primary cremations; secondary burial of remains in jars
Saukang Boe (Gowa 80)	Burned human bone, apatite fraction 450 $\pm$ 220 BP (ANU-5923)	515 BP (300-670 BP)	Large earthenware jar, gold, iron sword	Primary cremation (?); secondary burial of remains in the jar
Sompoh, Wajo	Vietnamese, Thai and Ming Chinese tradeware sherds	c.350-c.550 BP	Calcined human bone	Primary cremation; secondary burial of remains with pots
Lampokko, Bone	Vietnamese, Thai and Ming Chinese tradeware sherds	c.350-c.550 BP	Calcined human bone	Primary cremation; secondary burial of remains with pots
Soppeng royal burial sites	Yuan/Ming Chinese, Thai, Vietnamese tradewares	c.300-c.750 BP	Associated with pre-Islamic Soppeng rulers	Reportedly sites where tradeware urns held the rulers' cremated remains

TABLE 13-5. MAIN PROTOHISTORIC/HISTORICAL, PRE-ISLAMIC MAKASSAR PRIMARY BURIAL SITES

Site	Dating Material	Date (one S.D. ranges in brackets)	Other Main Associations	Inferred Type of Disposal
Bayoa, Sanrabone (Takalar 6)	780±80BP (ANU-5564) - wood from inside of hollowed log with 80 tree-rings	690 BP (670-770 BP) [590-690 BP]	Vietnamese, Thai, Ming Chinese tradewares	East-west directed, primary burial in boat-shaped coffin
Bayoa, Galesong (Takalar 20)	Vietnamese, Thai and Ming Chinese tradeware sherds	c.400-c.500 BP	Bones from 2-3 individuals, 3 coffins reported	Primary burials in boat-shaped coffins; east-west directed
Bayoa (Ujung Pandang 1)	270±120 BP (ANU-5927) - wood from boat-shaped coffin	310 BP (30-480 BP)	Bronze; Thai and mainly Ming Chinese tradewares	East-west directed primary burials with 1 boat-shaped coffin
Lamuru (Gowa 46)	Wood fragments reportedly from a boat-shaped coffin 340, 355, 430 BP (310-550 BP) 340±70BP (ANU-5922)	340, 355, 430 BP (310-550 BP)	Vietnamese, Ming Chinese and Thai tradewares	East-west directed primary burial with 1 boat-shaped coffin
Ulu Leang 1	Vietnamese pot gravegood	c.450-c.550 BP	Iron; shroud	East-west primary burial
Sompu, Takalar	Vietnamese, Thai and Ming Chinese tradewares	c.350-c.550 BP	Bronze, iron, gold items; earthenwares	East-west directed primary burials
Malawang, Pangkajene	Vietnamese, Thai and Ming Chinese tradewares	c.350-c.600 BP	Gold eyelid covers, iron knives	East-west directed primary burials
Palambeang, Pangkajene	15th-16th century sherds; Vietnamese covered box	c.350-c.550 BP	4 metre long board; decomposed bones; iron	Disturbed east-west log burial
Batang Mata Sapo, Selayar	Vietnamese, Thai, Ming Chinese tradewares	c.300-c.550 BP	Coin minted by Sultan Abdullah	East-west directed primary burials
Sabbang, Luwu	Vietnamese, Thai and Ming Chinese tradewares	c.350-c.550 BP	Bronze	Cemetery of primary burials (?)

13.2 South Sulawesi Lowland Pre-Islamic Burials

Elsewhere I have detailed the range of pre-Islamic burial sites currently documented in the South Sulawesi lowlands (Bulbeck, in press). The present review summarises the main examples (Figure 13-4), as well as incorporating the information from radiocarbon dates which have recently become available. Along the lines just explained, I have calibrated all the radiocarbon dates according to the charts in Stuiver and Pearson (1986), except for the single mid-Holocene date which has been calibrated from Pearson et al. (1986:1008). These calibrated dates are shown bracketed in Tables 13-3 to 13-5, which also summarise other main associations.

13.2.1 Prehistoric burials from closed sites

As a result of the strong interest in the "Toalean" flaked stone industry, which dates broadly to the middle Holocene, numerous rockshelters and caves have been excavated in the South Sulawesi lowlands (e.g. van Heekeren, 1972). In most cases the stone artefacts were associated with fragments of human bone, but always mixed with pottery, metallic and glass fragments as well, so the antiquity of the bones is unclear (Bulbeck, in press). The single exception comes from Leang Burung 1, one of the sites in Leang-Leang, Maros, re-excavated by Mulvaney and Soejono (1970). Among the still undescribed faunal assemblage I found an array of fragments, probably representing a single primary inhumation, from Trench B (Bulbeck, in prep. a). The circa 5000 year old calibrated date (Table 13-3) accords well with the trench's virtually aceramic deposits (Chapman, 1981).⁴

Trench A at Leang Burung 1 may be more typical of the generality of South Sulawesi's "Toalean" cave sites. The trench's clearly disturbed deposits contain comparable frequencies of potsherds and stone artefacts throughout, except in squares 3-5 below 140 cm where stone artefacts prevail (Chapman, 1981). After sifting through the excavated

⁴ The date also considerably expands the chronology of the deposits which were previously dated by a single calibrated date to around 3700 BP, with a single S.D. range of 3218-4239 BP (Spriggs, 1989:596).

Handwritten notes in left margin:
 13.2.1
 C. 6000 BP
 Leang Burung 1
 Spriggs

materials I found approximately 50 bits of human bone - either fragments or complete small bones - more or less restricted to the top 140 cm (Bulbeck, in prep. a). Chapman (1981:109) likens the pottery from Leang Burung 1 to globular cooking pots, so burial of some or all of the Trench A bones inside or with pots is only possible at best. Approximately 40 bits appear burned or at least scorched. The former evince longitudinal cracks indicating they had been macerated before their subsequent cremation in the dry state (cf. Ubelaker, 1984:35). The two femur fragments submitted for radiocarbon dating produced significantly older dates on the collagen than on the apatite fraction (Table 13-3), reflecting the problems with dating bone (e.g. Spriggs 1989:590-598). The best estimate for the ANU-6173 sample would be c.2000 BP, while the best estimate for the ANU-6174 sample would be c.1000 BP, i.e. broadly the 1st millennium AD for both. As regards the approximately ten bits which showed no evidence of firing, their calibrated radiocarbon date similarly places them late in the 1st millennium AD (Table 13-3).

The human bone from Trench A, Leang Burung 1, resembles the much larger assemblage from Arku Cave, northeast Luzon, dated between approximately 4000 and 2000 BP (Thiel, 1986-7). All the bones and fragments were from secondary burials, usually multiple, and only occasionally buried in jars. Outside of one small area which contained only unburned bone, almost all the discrete individuals recognised by Thiel were represented by components of burned and unburned bone, single burials included. This pattern is inconsistent with primary cremations that would have reduced the corpse to a state ready for secondary deposition of the bone (e.g. Gejvall, 1969). So either light cremation had been practised in preparation for full maceration, or the previously macerated bones were cremated as part of their preparation for final burial. In the latter interpretation, which would allow direct comparison with Leang Burung 1, the variable percentages of burned and unburned bone can be attributed to

differences in intensity of the heat, method of firing, cohesiveness of the macerated assemblage, etc.⁵

During late Holocene prehistory, secondary disposal of uncremated remains was possibly the most widespread burial practice in the eastern archipelago (e.g. Bellwood, 1985), in which regard the Leang-Leang sites follow suit. The interior of Leang Pette Kere contained an association of unburned human bones and potsherds (Glover, 1978:74). These remains can be interpreted in the context of Ulu Leang 2, Leang-Leang, where 79 kg of unburned human bone representing 50 individuals were collected along with 98 kg of earthenware sherds, 131 glass beads, a copper bead and four iron fragments (Andrews and Glover, 1986). Based on the associated artefacts, Andrews and Glover date the burials to the interval 1700-2000 BP. They also infer that the corpses had been macerated elsewhere before the bones were placed inside jars within the cave.

In some ways Ulu Leang 2 pairs with Leang Codong, Soppeng.⁶ In 1938 Willems and Frederick McCarthy excavated over 2500 permanent teeth of modern Indonesian morphology plus a sprinkling of other human bones (van Heekeren, 1972:112; Jacob, 1967). Objects from Leang Codong held at the National Museum in Jakarta comprise a stone point, 61 shell artefacts, seven sea-urchin spines, an iron point and some bronze leaf (Catalogue Nos 5529, 5551-4, 5586). McCarthy (pers. comm. 2-9-85) noted further stone artefacts and 15 beads (red carnelian, white stone, pink and blue) during the excavation. Van Heekeren (1972:112) cites 12 barbed arrow-heads, shell scrapers and potsherds. The last could not have been significant because pottery is not noted in any primary (Anon., 1938; McCarthy, pers. comm. 2-9-85) or secondary source (van Heekeren, 1949:92). Leang Codong was apparently an ossuary for teeth and some other bones buried directly or within perishable containers, datable to the 1st millennium AD by the associated Metal Period artefacts.⁷ By

⁵ Thiel (1986-7) does not describe the fracture patterns, proportional representation of the skeleton or other details which would allow a definitive interpretation.

⁶ Usually known, incorrectly, as Leang Cadang.

⁷ Jacob (1967:116) ascribed Leang Codong a "Mesolithic" date based on the scanty "Toalean" assemblage. But obviously the

Metal Period artefacts are a better guide, especially as the teeth are of modern Indonesian size and morphology (Jacob, 1967; Bulbeck, 1986). From the descriptions it is clear that the deposits, which have been completely excavated, had no stratigraphic integrity. The floor slopes strongly downwards from the entrance to the back of the shelter (fieldnotes), not to mention the disturbance caused by the burials.

analogy, some (and, not possibly, all) of the other fragmentary human remains considered "Toalean" by van Heekeren (1972) would represent late Holocene secondary burials (Bulbeck, in press). Let us summarise the evidence on burials in the South Sulawesi lowlands dated to between c.1000 and c.2000 BP, a period which can be confidently identified with the direct ancestors of the Bugis and Makassar (1.3). The dominant burial practice consisted of macerating the corpse, collecting the bones and depositing them in a rockshelter or cave. Communities which did not have access to closed sites presumably deposited the bones in open contexts, even if there is as yet no clear supporting evidence. In some cases the bones were cremated before disposal, presumably as a purification rite (cf. Tillotson, 1989a), and in some cases the bones were deposited inside jars. Neither primary inhumations nor, possibly, cremations of the corpse rather than the macerated bone (see 13.2.2) appear to have been practised in the South Sulawesi lowlands during this period. To follow Tillotson's (1989a, 1989b) review of ethnographic mortuary practices in island Southeast Asia, we would infer that the late prehistoric Bugis and Makassar had been organised into competitive ranked societies. Wealth was seen not as an accumulable asset but in terms of producing and redistributing agricultural surplus, notably at the complex mortuary feasts which showed off the family's ability in this regard. Individual communities would have enjoyed political autonomy within an environment of strenuous competition for power and status between individuals within the communities, and between communities. The economy was probably based on subsistence agriculture carried out within the territory owned by the community.

13.2.2 Immediately Pre-Islamic burial grounds

Considering the protohistorical secondarily burial sites (Table 13-4), we note the dominance of cremated remains buried in jars, at open sites, dated to between c.350 and c.850 BP (1100-1600 AD). Although only a minority of SSPHAP's pre-Islamic Makassar burial grounds evince this tradition, it was the common practice among the Bugis before Islamisation. For instance van Vuuren (1914) excavated an urn containing "ashes" in Wajo, and reported other urns and an urnfield in Wajo, Sidenreng and Bone. Calcined human remains were found with Ming period tradewares at Sompoh in Wajo and Lampokko in Bone (van Heekeren 1958:84-85). The tradewares recorded at commemorated elite cremation sites in Soppeng were predominantly of Ming vintage, and 9-20% were either complete urns or coarse stoneware sherds (Kallupa et al., 1989).

The bone from Talaborong (Gowa 24) suggests primary cremation of the corpse rather than secondary cremation of the macerated bone. A wealth of historical references indicate the same for the Bugis (Hadimuljono and Macknight 1983:69-71). For instance, a 16th century Portuguese account of Sawitto states that the dead were burned and the ashes collected in jars for burial. The Wajok chronicle describes the cremation of two pre-Islamic figures, in one case specifying disposal of the ashes in an urn.

One example of the same practice recorded in a cave at Leang-Leang, rather than an open site, should probably also be considered "protohistoric" rather than prehistoric. Glover (1978:74) collected charred human bone fragments, associated with dark-surfaced incised potsherds, directly above the entrance to Leang Pette Kere. Boedhisampurno (1982) attributes the 170 fragments to four male and two female adults, and describes them as cremated when still fresh. He further reports that Glover felt the pottery was broadly Metal Period, i.e. within the period 1000-2500 BP. Given the apparent lack of gravegoods, the mode of burial is possibly our safest guide to providing a date. A date of c.1000 BP may be the best estimate until further study shows the remains are either younger or older.

There are also hints that the secondary deposition of macerated but uncremated remains was not totally discontinued before protohistoric times. The large earthenware urns excavated by Willem (1938) at Sabang, Luwu, did not contain any preserved bone, which possibly suggests that they had held uncremated remains. Interpretation of the site as a cemetery depends largely on local memories to that effect (Willem, 1938), which in turn suggests a date within the last 1000 years. In addition the deeper levels at Sompu, Takalar, contained patchily represented and peculiarly disposed human remains which, to go from their description, were uncremated (Tjandrasasmita, 1970:7,9,11,17).⁹ Finally, numerous limestone caves along the Bulukumba coastline, directly across the strait from Selayar Island, contain human bones. They are either single or piled together, free or placed within log coffins, and so might include secondarily disposed remains (Engelhard, 1884; Muttalib, 1983). In one cave Engelhard (1884:377-379,392) collected glass beads, bronze jewellery, an iron sword, fine local pots including kendis, and three early Ming coins - objects which would appear to date up to the 15th century.⁹

The dominant mortuary practice observed at SSPHAP's immediately pre-Islamic burial grounds - east-west oriented inhumations, sometimes associated with duni - also characterises other areas populated by people speaking Makassar languages (Table 13-5). Examples have been excavated at Ulu Leang 1 in Leang-Leang (Glover, 1976); Sompu, Malawang and Palambeang (Tjandrasasmita, 1970); and Batang Mato Sapu in Selayar (Wibisono, 1985). In all cases the associated tradewares are Ming period.¹⁰ The Palambeang excavation even recovered a duni (Tjandrasasmita, 1970). Moreover, the 16th century Portuguese sources note that the dead at Gowa were buried (Hadimuljono and Macknight, 1983:69), while Gervaise

⁹ Sompo's deeper levels also produced burned remains interred in jars, interpreted by the excavators as water buffalo burials (Tjandrasasmita, 1970:27), but which I think might have been cremated human remains.

¹⁰ The possible chronology of the remains in the Bulukumba "death caves" urgently needs to be sorted out.

¹¹ Sompu produced some earlier tradewares, but in association with the apparent secondary burials.

(1688) mentions the wealth of ceramics, jewellery and gold looted from an old royal grave at Gowa.

On present evidence the Sanrabone duni provides the earliest direct date on the practice which, thus, appears to have spread within the coastal Makassar belts from at least the 14th century. Circumstantial evidence further suggests the practice was adopted in coastal Luwuk, a Bugis area. The spectacular antique hauls recently made in Luwuk are not in keeping with other Bugis areas but instead recall the coastal Makassar belt (Reid, 1983a:122).¹¹

In summary, at around 1000 AD open burial sites in the South Sulawesi lowlands began to proliferate, and the practice of primary cremations had appeared in the peninsula's southwest corner. By c.1400 AD the central distinction between primary cremations in most Bugis areas, and primary inhumations in coastal Makassar areas and (apparently) Luwuk, was well established. As a body these sites indicate a transformation of the social landscape. Firstly, even the oldest generally occur within a site complex which includes immediately pre-Islamic to Islamic cemeteries, suggesting that they mark the foundations of historical continuity into the present societies. In the same vein, the graves of the most prominent figures were permanently marked, and many can still be recognised today. Finally, the distillation of two widespread but distinct burial traditions suggests that communities over large areas had begun to realise common cultural affinities, i.e. two major culture areas were under establishment.

13.2.3 Wider patterns in the archipelago

While primary cremations and primary inhumations may well be new developments in South Sulawesi during the 2nd millennium AD, both practices have lengthy antecedents in the islands to the west.

¹¹ In June 1985 Campbell Macknight and myself briefly inspected one large pot-holed area, less than a km from the Sabbang urnfield, and were shown a wealth of bronze artefacts and Ming period tradewares from the site.

Clear evidence of primary cremations dated to the

Neolithic or the Metal Period comes from the West Mouth of Niah Cave, Sarawak. Firstly, some of the 68 extended burials show partial burning, which suggests incomplete cremation of the corpse followed by primary burial (Bellwood, 1985:254). Secondly, Harrisson (1967) divides the 59 secondary burials into "cremations", where the bones are distorted and largely converted to ash, and "illustrations" where the application of heat has fractured or superficially charred the bones. While Harrisson's categories probably do not exactly correspond to cremations of the corpse and cremations of macerated bone, they cover the same range (cf. Ubelaker, 1984:35-36).

As implied above, the West Mouth of Niah also contained primary inhumations which do not show traces of cremation, sometimes buried in log coffins which may be the oldest yet dated in the archipelago (Bellwood, 1985:89,256). Cemeteries dominated by extended burials, often associated with log coffins, have been excavated widely in Sumatra, Java, Bali and the Malay peninsula, in contexts dated between 1000 BC and 1000 AD (Bellwood, 1985:265, 289-301; Peacock, 1979; Soejono, 1985; Tilletson, 1989b). The two log coffins dated from Sabah are also approximately 1000 years old (Bellwood, 1988b:252-253).¹² Such cemeteries appear absent from these places after 1000 AD, presumably reflecting a widespread adoption of cremation.¹³

As the practices described above do not seem to have appeared in South Sulawesi before the 2nd millennium AD, the prospect is raised of the adoption of new cultural repertoire. However, as Dianne Tilletson pointed out to me, both practices can be seen as a simplification of late

¹² The Madai 1 coffin was excavated on top of a coarse stoneware jar placed beneath the drainage hole to catch the decomposed body fluids. The jar has been identified as a possibly 14th-15th century Kalong or other Thai ware, which would make it at least three centuries younger than the coffin on top (Bellwood, 1988b:252). However, the pictures of the jar (Bellwood, 1988b:234) show that it has the ovoid form, four horizontal handles and rolled rim which characterise the Chinese and Vietnamese jars made during the 10th-13th centuries and exported widely to the archipelago, including Borneo (see Harrisson, 1986).
¹³ Later replaced by Islamic mortuary practices in much of the area.

prehistoric Bugis-Makassar eschatology. The old rite of macerating the corpse and burning the bones before their disposal could have been transformed into primary cremations (and secondary burials) by simply burning the corpse before maceration, or rather as the method of maceration. And primary inhumation can be seen as combining maceration, and disposal of the corpse with its gravegoods, in one act. Even the log coffins need not have been a new element because, as recorded in numerous ethnographies (Tillotson, 1989a), the old practice of macerating the corpse may well have occurred in above-ground coffins already containing gravegoods. Whether or not the immediately pre-Islamic Bugis and Makassar practices involved new attitudes to death, they are best interpreted as marking a new internal social organisation.

The direct parallel for the extended inhumations practised by the coastal Makassar comes from the Philippines lowland and especially coastal locations. Philippine cemeteries containing inhumations are unknown before their proliferation during the early 2nd millennium AD, associated with occasional log burials (Hutterer, 1973; Ronquillo, 1987; Tillotson, 1989b), and tradewares dating between the 12th and 16th centuries (Evangelista et al., 1981; Langrick, 1982; Hutterer, n.d.). Tillotson (1989b:9) links these sites with the rise of trading entrepôts, arguing that the shift from subsistence preoccupations to a more entrepreneurial economy had fostered the use of simpler and more materialistic mortuary status markers. Hutterer (n.d.) associates the increasing quantities of tradewares and size of the burial grounds with the development of large-scale societies, hereditary social strata and supralocal political hierarchies, as indicated by the earliest Chinese and European historical sources. Hutterer further notes that the internal and external social hierarchies were still immersed within a bilateral kinship system, which would agree with the weak spatial segregation between the rich and the poor in the cemeteries (Langrick, 1982).¹⁴ This general perspective can

¹⁴ Langrick's analysis further suggests to her that the Philippine societies were egalitarian, i.e. equivalent to Tillotson's competitive ranked societies. However, her use of the amount of energy expended in a burial as a guide to

accommodate all the available data on immediately

pre-Islamic, Makassar burial grounds before the establishment of designated royal cemeteries during the 16th century.

The details are so similar in the Philippines and South

Sulawesi lowlands that totally independent development seems

unlikely. In particular the Bajau, whose area of influence

has long extended to Borneo, the Malay peninsula and the

southern Philippines, appear to be deeply implicated. All

three complete duni recorded by SSPHAP were found at a

locality specifically called Bayoa. Coincidence maybe, but

the one-to-one relationship between the toponym Bayoa and the

four major rivermouth ports - Tallok, Makassar, Kota Galesong

and Sanrabone - is not.¹⁵ Nor is there any particular reason

to doubt that the Gowa royalty originated with the marriage

of a Karaeng Bayo and a Katangka (Gowa) princess (13.1.1).

Very probably the Bajau of the southwest coast practised

primary east-west inhumations, possibly the first group to do

so. Their apparent status as a major early trading community

could well have facilitated the switch by the Makassar to

this simplified burial procedure.¹⁶

It is more difficult to interpret the immediately

pre-Islamic cemeteries of the Bugis, south of Luwuk, owing to

the lack of professional excavation. However, note that

hereditary stratification appears to have developed earlier

here than elsewhere in the peninsula (13.4.1), and the vast

quantities of "early" and "Ming" tradewares at Soppeng's

social complexity appears to be directly inapplicable to the

Austronesian situation (especially because, as Tilletson

shows, the competitive ranked societies usually expended

energy in disintegrating rather than elaborating the burial

remains). Further the cremations at Pila need not represent a

custom introduced to the Philippines at around the 14th

century, given a much earlier presence at Arku Cave.

¹⁵ Here I ignore "Bayoa 2" which appears to represent a late

resettlement from Bayoa at Makassar (11.4.1). Note that the

Sanrabone River continued to function as a major river

harbour for craft until the very late 17th century (cf.

Andaya, 1981:168).

¹⁶ Note that I am not advocating some simple model of

cultural diffusion. Rather, I hold that cultural traits and

complexes diffuse because they answer local cultural

requirements. The case for long-term contacts between South

Sulawesi and the Philippines, which would make "independent

"invention" of the same burial practice unlikely, is

adumbrated by Macknight (1986).

former palace sites (Kallupa et al., 1989) highlight the importance of trade. On present evidence, it can be reasonably inferred that both aristocrats and commoners were cremated, with status differences marked by the permanence and grandeur of the shelters built to protect the remains buried in jars (Hadimuljono and Macknight, 1983:69-70; Kallupa et al., 1989).¹⁷ A number of complementary reasons can be proposed for the Bugis preference for cremations. Cultural contradistinction from the societies practising inhumations could have been desirable. The Bugis heartland societies retained a primarily agrarian basis (e.g. Caldwell, 1988) and hence a continuity of the traditional concern with subsistence rituals (cf. Tillotson, 1989b:9). Further, cremation as a mortuary practice was then fairly widespread in the western archipelago, which could have encouraged the Bugis tendency to do the same.

13.3 Settlement Pattern Analysis

13.3.1 Main results of the site clustering analysis

The total area-sites, point-sites and historical toponyms recorded during SSPHAP's Gowa survey are shown in Figure 13-5, along with relevant toponyms and Suaka sites outside the surveyed area.¹⁸ The target sites were "surface

¹⁷ Hadimuljono and Macknight (1983:70) suggest that the Bugis cremations represent Indic influence, and so may have been restricted to the aristocracy. But the Portuguese accounts do not support the proposition, and the archaeological evidence from Niah shows that primary cremations preceded any Indic influences in the archipelago. Moreover, primary cremations were apparently established at coastal Makassar locations by around 1000 BP.

On top of that, it is hard to imagine what other funerary rite could have been practised among the commoners. Cemeteries of inhumed pre-Islamic Bugis would have been discovered by now if that were the case. The only other possibility would be that the corpses of Bugis commoners were macerated and the bones then disposed of, possibly after secondary cremation. But this seems unlikely as the commoners would then have received more complex treatment than the aristocracy.

¹⁸ The Suaka sites in Kecamatan Galesong Selatan were plotted to indicate the case for a spatial and hence a social orientation of Kota Galesong to the southeast rather than to the north. The point is not relevant here.

archaeological remains found either within 17th century and earlier burial grounds, or within the directly associated area" (5.5.1). Note that all fortifications were detectable as target sites. Also, the more substantial burial grounds were often associated with considerable evidence of contemporary occupation in the direct vicinity, especially where "site" (i.e. number of sites or the area covered by site) appears densest (e.g. 6.5; 7.1). Sometimes the target sites apparently hosted burials during just part of their existence as substantial kampungs (e.g. 9.4 and 9.5.1); sometimes occupation at a site preceded its use as a burial ground.¹⁹ Sometimes burial grounds apparently acted as the anchor within a peripatetic or expanding settlement system (e.g. 8.3). All in all, the target sites appear to correspond to the former long-standing fixtures in the social landscape, and the density of site corresponds to the long-term socio-political importance of an area.

The main results of the various site clustering exercises are brought together in Figure 13-6.²⁰ Overall there is a pleasing tendency for the cluster centres to coincide with key sites, i.e. palace sites in the high political arena between Benteng Anak Gowa and Tallok, and complex burial grounds further afield. Examples of successful "identifications" of palace sites include Benteng Tua, Anak Gowa and, to a lesser degree, Bonto Alak.²¹ Examples of successful "identifications" of complex burial grounds include Saumata, Paccellekang, Pattalassang, Borongloe, Aengtoa, Mandallek and Kota Galesong. Moreover, the largest (Saumata Lama, Mandallek Toa) are more stable as central sites than are smaller burial complexes such as Paccellekang Lama and Borongloe (see Figures 9-2, 10-2 and 11-6).

¹⁹ e.g. Sampulungang and Makam Datu Bonto Lebang (Bulbeck, in prep. b).
²⁰ Although not proven in the clustering exercises, I know of further looted burial grounds a short distance south of the "Bonto Pakja" group, which would probably have the effect of allowing the Benteng Tua and Anak Gowa clusters to join into a "supercluster".
²¹ My lack of success in "identifying" the river mouth palace sites of Tallok and Somba Opu reflects the lack of sites at sea. I have not tried to factor in the merit of access to the sea in my "central place" model.

The "Tallok cluster" is strung along the coast southwest of the Tallok mouth. A distinct "Makassar cluster" stands out at the former mouth of the Garassik (Jeknekberang), and its closest spatial links are with the site cluster centred on the lower Aeng. Further south the Jamarang, Mandallek and Galesong clusters correspond to the drainage basins of coastal streams. River mouths and streams clearly acted as the anchors of the historical settlement system along the coast (Figure 13-6).

The dotted line drawn 3.6 km inland from the 17th century coastline in Figure 13-5 neatly plots the hinterland border of the coastal clusters, and possibly points to the existence of a Makassar historical "pesesir" subculture with strong orientations to the coast. The dotted line 8 km inland from the 17th century coastline neatly demarcates the lower-middle Jeknekberang sites (Chapters 6 to 8) from those further east (Chapters 9 and 10). It may validate the notion of an "immediate hinterland" as opposed to a "hinterland" adaptation, at least within the survey area (Figure 13-5).²²

The average-linkage procedure which I used to cluster the sites is a type of hierarchical clustering (6.6.1), and hence it produced a hierarchical result even if the intersite distances conform to a random distribution (e.g. Sneath and Sokal, 1973). To test whether the intersite distances depart from a random distribution, I followed the formula and procedures of the Nearest Neighbour Analysis as outlined by Gibbon (1984:227). After sectioning the 1:50k version of Figure 13-5 into coastal, immediate hinterland, and hinterland areas - based on the lines 3 km and 7.5 km inland from the late 17th century Gowa coastline - I then used 1 mm graph paper to measure the surveyed areas, and took the nearest neighbour distances of the "point-sites" and "site-areas" within the continuously surveyed area.

²² To draw these lines I have translated the 17th century coastline along a southeast axis to fit the main axis of river drainage, rather than translate the coastline south-east-east as would better fit the axis of the coastline itself.

23 Arguably, the degree of clustering has been overestimated because my distance measurements exclude area within the sites (6.6.1). However, any such overestimation is slight, because the surface area shown as site in the main surveyed area is only about two square kilometres (see Appendix C).

I suspect that Reid's (1983a) crucial article on Makassar has relied too heavily on the European sketches, prompting gathering rather than population distribution.

c.1638 sketch reflects the limits of Dutch intelligence areas did (Table 13-6). Clearly this particular aspect of the clusters - produced a higher site density than the coastal i.e. the area covered by the Benteng Tua and Anak Gowa Indeed the sites in the immediate hinterland - with the distribution of historical sites (Figure 13-5). 1-1 depicts the city's hinterland as a vast uninhabited plain stretching to the mountains. This contrasts acutely The c.1638 sketch of Makassar (partly reproduced in photo 13.3.2 Population densities

1976:40). 23 clustering is highly significant (cf. Hodder and Orton, cases. C is estimated at 17.76, indicating that the degree of test statistic to the total sample because n exceeds 100 surveyed area as a whole. Furthermore, we may apply the C pattern (R < 1) within the three areas considered and in the (Figure 13-5) that the sites are clustered beyond a random The results (Table 13-6) confirm the visual impression # includes only those sites with their nearest neighbour definitely within the surveyed area.

Average Number of nearest neighbour sites#	Distance surveyed Area Density (sites/km ²) (R)	Degree of Randomness
Coastal	51	308.84 m
Immediate Hinterland	43	220.91 m
Hinterland	49	400.10 m
Total	143	313.67 m
	0.86	167 km ²
	0.56	98 km ²
	0.53	30 km ²
	1.43	0.86
	1.31	0.58
	0.73	

TABLE 13-6. NEAREST NEIGHBOUR ANALYSIS - MAIN SURVEYED AREA

him to model Makassar's rise within a sparsely populated landscape (p.120), and to relegate Benteng Tua to the status of a mere sacral centre from around 1590 onwards (p.141). Rather, the land behind Makassar has had a very long history as a densely populated network of rice bowls (Chapters 6 to 10) and must have been a key factor behind Makassar's success. Previous accounts of Makassar correctly identify the importance of its proximity to good sawah land, but misleadingly emphasise the distant fields of Maros and Takalar (e.g. Reid, 1983a:119; Villiers, 1991:152). Indeed the continually growing status of Makassar as an entrepôt, from the early 16th century to the late 17th century (and till this day), correlates with augmented discharge along the Garassik as its source cut back, until capturing the headwaters of the Sanrabone River in the 17th century (11.1). Not only would the river's growth have provided better anchorages and more available drinking water near the mouth, but also it would have enhanced the seasonal inundation and wet rice yields in the city's direct hinterland.

Population estimates which can be derived from the historical sources, rubbery though they are, support the view that considerably more people lived around Makassar than in it. In this exercise I will follow Reid's (1987) understanding of Makassar as the coastal strip from Ujung Tana to Paknakkukang extending around one km inland.²⁴ The contiguous villages can then be understood as the surrounding arc embracing the rest of the Makassar cluster and Bonto Alak supercluster, and all of the Aeng, Anak Gowa and Benteng Tua clusters (Figures 13-5 and 13-6). The wider surrounds can be understood as the area beyond the contiguous villages but still within a 20 km radius of Makassar.

Turning to the derived population estimates (Table 13-7) we see that in the period 1614-1615, the number of people living within 24 hours' mustering distance (say 20 km) was maybe five to six times the number that lived in the city. During the heyday of Makassar, say the 1630s to the 1660s,

²⁴ When estimating from the sites I will allow two kilometres as this is the distance of Bonto Alak, one of the key locations in the city, from the sea.

TABLE 13-7. ESTIMATES OF POPULATION SIZE IN OR NEAR MAKASSAR
 Estimates from Historical Sources (after Reid, 1987)

Year	Referred Area	Reference	Population Size
1614	Makassar City	1260 houses burned down (assume 20% of total)	25,200-31,500
1615	Circa 20 km radius of city	36,000 fighting men mustered within 24 hours	180,000
1636	City and contiguous villages	60,000 died in a plague (assume 30% of total)	200,000
1640	Makassar City	10 houses per acre	100-125,000
-1660			
1660s	City and contiguous villages	160,000 men capable of fighting (accept 400,000)	800,000

Estimates from Number of Toponymic Sites

Referred Area Number of Sites/ Population Size Historical Toponyms

MAKASSAR CITY	30	30,000
Bonto Alak supercluster	28	28,000
Mangalilekana cluster	6	6,000
Makassar cluster	16	16,000
Aeng cluster	9	9,000
Benteng Tua cluster	30	30,000
Anak Gowa cluster	12	12,000
CITY AND CONTIGUOUS VILLAGES	101	101,000
Upper-Middle Jeknekerang	33	33,000
Tallok Headwaters	32	32,000
North Polombangkeng	16	16,000
Kota Galesong	9	9,000
Other	13	13,000
20 KM RADIUS OF CITY	204	204,000

N.B. Four to five persons per household assumed (based on contemporary Indonesian statistics). Reid assumed four. 20% of population able to bear arms allowed as a generous estimate (based on general demographic data of pre-industrial societies). Reid allowed a maximum 40%.

1900 people per toponymic site inferred for SSPHAP's survey. Toponymic sites are shown in Figure 5-2, historical toponyms and Suaka sites in Figure 13-5, and the site clusters in Figure 13-6.

the number of people living in contiguous villages was twice or thrice the number in the city.²⁵

To derive estimates from the site survey I use "toponymic sites" (5.6.1) to strike a direct parallel with the historical toponyms which are crucial in this exercise. My toponymic sites basically reflect the number of burial grounds associated with distinctive kampung-like toponyms. To convert these frequencies to population estimates, I refer to the present situation in Kecamatan Somba Opu and Kecamatan Bonto Marannu in Kabupaten Gowa, and Kecamatan Galesong Utara in Kabupaten Takalar, as these were virtually surveyed in full.²⁶ I counted 41 modern Islamic cemeteries associated with distinctively named kampungs in Somba Opu, estimate 44 in Bonto Marannu, and counted 28 in Kecamatan Galesong Utara. These serve 41,369 inhabitants, 35,792 inhabitants and 27,784 inhabitants respectively (cf. Kantor Sensus dan Statistik Sulawesi Selatan, 1985:Table 1.2). Averaging these figures leads to 972 (around 1000) people per modern equivalent of my toponymic sites.²⁷

The results of inferring 1000 historical inhabitants per toponym or toponymic site are shown in Table 13-7. They should be an overestimate of the population, even in Makassar's heyday, because a proportion of my toponymic sites had fallen into disuse as burial grounds by the 17th century. But they correspond very well with the figures estimated for 1614-1615: around 30,000 people in the city; 71,000 further people in contiguous villages (twice to thrice the number in

²⁵ Strictly speaking we would estimate two to seven times the number. However, Gervaise is noted for having romanticised the achievements of the Makassar, and his report of 160,000 fighting men possibly doubles the likely figure.

²⁶ To accommodate the Bontomanaik area of Kecamatan Bonto Marannu, which is the main area missed by my survey, I accept one cemetery for every kampung distinctively named on the Dutch land-use maps.

²⁷ This figure seems large as it far exceeds the usual number of inhabitants per kampung or the greatest number of marked graves which SSPHAP recorded in any cemetery. The first point is explained by the common practice of centralised burial grounds serving several kampungs. The second point would reflect the large proportion of graves whose markers are either perishable or likely to become indistinct owing to vegetation regrowth, human or animal use of the cemetery, etc. (see Appendix F).

the city); and a total of around 200,000 in these areas plus the wider surrounds.

Makassar at its peak is probably underrepresented by my data. North of Somba Opu, I had to rely on toponyms; I did not consider Makassar's foreign residents (12.3); and many former sites at the Garassik (Jeknekberrang) mouth must have been destroyed or deeply buried (11.2). Let us assume that Reid's (1987) preferred estimate of 100,000 residents in Makassar during its heyday is a better estimate. Let us further assume that my survey of the wider surrounds covered only half of the population living there. Changing nothing else, we would have 100,000 people in Makassar; 171,000 in Makassar and its contiguous villages; and a total of 377,000 in these areas plus the wider surrounds. These figures are quite comparable with those suggested, by the historical sources, between the 1630s and 1660s (cf. Table 13-7).

Regardless of how we play around with the data the same range of estimates surfaces. This encourages me to accept the general reliability of the figures, including the estimates derived archaeologically. Now, only the archaeological evidence allows us to estimate population densities earlier than the 17th century, so I restrict my comparisons to the continuously surveyed area. To follow the divisions used in Table 13-6 I recognise a coastal belt with an estimated 53,000 inhabitants; an immediate hinterland with 43,000 inhabitants; and a hinterland with 71,000 inhabitants.²⁸ The sites which might represent these people are toponymic sites where some tradeware sherds were recorded: 47 along the coast (1128 people/site); 41 in the immediate hinterland

²⁸ These figures follow from accepting my estimates based on the number of archaeological sites (cf. Figures 5-2, 13-5 and 13-6) as representing the mid-17th century situation. The estimated 79,000 inhabitants along the coast between the Tallok cluster and the Saro sites immediately south of Kota Galesong include 53,000 in the continuously surveyed area south of Somba Opu. The estimated 51,000 inhabitants in Makassar's immediate hinterland (i.e. the isolated Lakkang toponym and the Bonto Pakja group, as well as the Pampanang, Benteng Tua and Anak Gowa clusters) include 43,000 in the continuously surveyed area. The estimated 73,000 inhabitants further inland include 71,000 within SSPHAP's continuously surveyed area.

(1049 people/site); and 68 further hinterland (1044 people/site).

The age estimates accepted by SSPHAP for datable pre-Qing tradeware classes and individual pieces (Appendix B) frequently cover two centuries (e.g. 15th-16th centuries) or straddle different centuries (e.g. late 15th to early 16th century). These sorts of estimates can be assigned forward in time, i.e. a 16th century date for the cases just mentioned, to bring them into comparability with pieces dated to a single century are assigned. Figures 13-7 and 13-8 show the distribution of the pieces thus dated across the toponymic sites.

If there is a correspondence between the number of sites dated by tradewares and the population represented, then SSPHAP's sites dated to the 17th century should correspond with the population estimates derived from historical references. By area there are 39 such sites along the coast (1359 people/site), 27 in the immediate hinterland (1593 people/site), and 56 further inland (1268 people/site). The number of people represented per site varies within tolerable limits, suggesting that we can use the combined average - 1369 people/site - for the sites dated by the presence of earlier tradeware classes. The resulting estimates are given in Table 13-8.

Consider first the 17th century estimates which, as discussed above, appear to match the figures suggested by the historical records. The densities exceed 1200 people per km² along the coast and in the immediate hinterland, and 1000 people per km² overall. Now these sorts of urban population densities might be expected of Speelman's "Makassar city" and Benteng Tua. After all, the 17th century brick constructions included 11.4 km of wall around the four palaces (Benteng Tua, Tallok, Somba Opu and Sanrabone) and a similar length along the coast. In addition, the inland densities have been exaggerated by the strong survey emphasis on the rice lands, and the 1693 map (Figure 5-5) indicates a proliferation of kampungs along the south coast. The figures appear realistic

TABLE 13-8. POPULATION DENSITIES AND DISTRIBUTION OVER TIME

Number of toponymic sites dated per interval				
14th century	15th century	16th century	17th century	Total sites
11	19	35	39	47
19	18	26	27	41
13	25	52	56	68
Coast				
Immediate hinterland				
Inland				
43	62	113	122	156
Total				
Raw estimates (assume 1369 people per dated toponymic site)				
14th century	15th century	16th century	17th century	
15,059	26,011	47,915	53,391	
26,011	24,642	35,594	36,963	
17,797	34,225	71,118	76,664	
58,867	84,878	154,697	167,018	
Total				
Estimated people per square km (cf. areas in Table 13-6)				
14th century	15th century	16th century	17th century	
386	667	1229	1369	
867	821	1094	1232	
181	349	727	782	
352	508	927	1000	
Total				
Proportion of population in different zones (percentages)				
14th century	15th century	16th century	17th century	
25.6	30.6	31.0	32.0	
44.2	29.0	23.0	22.1	
30.2	40.3	46.0	45.9	
100%	100%	100%	100%	
Total				
Proportion of 17th century population at earlier phases				
14th century	15th century	16th century	17th century	
28.2	48.7	89.7	100%	
70.4	66.7	96.3	100%	
21.4	46.4	92.9	100%	
34.4	51.6	92.7	100%	
Total				

if, maybe, slightly too high.²⁹

The population densities calculated for earlier periods are predicated on a constant ratio between toponymic sites and population represented, which may not be a sustainable assumption. Certainly, much lower densities would have resulted from calculations based on the number of dated tradewares rather than the number of sites (B.4.5). But hundreds of people per km² in certain areas such as the vicinity of Benteng Tua, even by the 14th century, may be a reasonable inference. The general implication of a three-fold population growth between the 14th and 17th centuries may well be the right order of magnitude.

The estimated proportion of the population in the various zones within SSPHAP's survey area reiterates the conclusions already derived from the tradeware profiles. The immediate hinterland³⁰ appears to have contained by far the greatest population density by the 14th century. During the centuries that followed, population growth along the coast and in the further hinterland apparently greatly outstripped the concurrent population growth within the immediate hinterland. The data suggest the development of quite intensive wet rice agriculture in the immediate hinterland by the 14th century. By this time the initial conversion of the mature river valleys of the Tallok headwaters into large expanses of rice fields had probably begun. Population growth along the coast can possibly be attributed to more intensive subsistence activities (wet rice agriculture and other farming, the development of fish ponds, more intensive fishing), but above all to the growing importance of trade.

²⁹ Compare them, for instance, with the modern population densities which can be calculated from Kantor Sensus dan Statistik Sulawesi Selatan (1985:Table 1.2) for SSPHAP's main surveyed kecamatan: 1473 people per km² in Somba Opu; 260 people per km² in Bonto Marannu (which includes a lot of lightly occupied foothills); 1277 people per km² in Galesong Utara.

³⁰ And slightly further inland as well to incorporate the "early" burial grounds at Saumata Lama and Cellaya (Chapter 9).

13.3.3 Geopolitical transformations

I base my estimates of the area under Gowa's direct control on the recorded membership of Gowa's Bate Salapang (Mukhlis, 1975:60-62),³¹ the distribution of karaengships held by Gowa aristocrats, and the location of Gowa's palace. Only the latter two sources of information are available for Tallok, and I assume that its Gelarang districts fell within the same area. I also plot abutting independent kingdoms and, where relevant, their extended existence as semi-autonomous karaengships (e.g. Jipang). Boundaries separating contiguous places associated with abutting polities are drawn along the perpendicular bisectors. As so much information is available I dispense with redundant data points,³² and summarise the much fuller series which could be reconstructed down to ten phases (Figures 13-9 to 13-11).

We can begin with the apparent situation immediately after Kglœ ri Sero's installation at Tallok (12.4). The number of Gelarang who are unambiguously cited as supporting Batara Gowa (12.1.1) comes to nine (Figure 13-9a) which suggests that it represents the origins of Gowa's nine representative districts. In that case the nine cited as the original founding flags (Figure 2-2) could represent the nine at the time writing was locally developed, during Tumapakrisik Kallona's reign, backdated to Gowa's origins only for the want of evidence. Certainly the restricted area they cover would fit other evidence of significant territorial expansion by Tallok during Tunipasukruk's reign, notably at Gowa's expense (Figure 13-9b),³³ and the possible evidence of concurrent social instability in the Tallok headwaters

³¹ The precise location of some of the Bate Salapang members, notably Mangasa, is not certain, but the distances involved in choosing one of the other possible locations are insignificant.

³² e.g. Benteng Tua rarely if ever did not contain a Gowa aristocratic karaengship, but Gowa's control of the fort is clear from plotting the Bate Salapang. Similarly, the main palace (Somba Opu) and subsidiary palaces (Benteng Tua and Anak Gowa) which can be recognised for Tunipalangga's reign (Figure 13-9d) could also have been depicted as Gowa aristocratic karaengships.

³³ The intermediate phase between Figures 13-9a and 13-9b, when Gowa ruled Garassik, is not depicted here.

(10.8). Gowa's spectacular territorial expansion towards the end of Tumapakrisik Kallona's reign, primarily at the expense of Polombangkeng at the south (Figure 13-9c), is clear from plotting Gowa's Bate Salapang (4.2.1) and local vassals (Figure 4-3).

A political renaissance in Polombangkeng during Tunipalangga's reign is clear from the re-emergence of Jipang and Sanrabone as independent polities, and the removal of Tumapakrisik Kallona's southernmost Gelarang, Manuju, from the Bate Salapang (Figure 13-9d). Tumapakrisik Kallona's northernmost Gelarang, Sudiang, also appears to have been regained by Maros. The contraction of Gowa's local territory does not contradict Tunipalangga's status as a great warlord, rather it reflects the redirection of his energies towards military conquests further afield (Figure 4-4). His conquests also included Bajeng, suggesting that Tunipalangga had decided to settle the Polombangkeng question permanently by removing its leading member. By Tunijallok's reign Gowa's Bate Salapang covered their former extent; Mandallek appears to have been replaced by a Galesong ruled by a Gowa noble; and Tunijallok had taken Tallok as Gowa's wife (Figure 13-10e). Tunijallok's focus on local political power, which also included the defeat of Maros, corresponds to his apparently reduced interest in the wider military horizons (Figure 4-4). It also set the stage for his son, Tunipasuluk, to rule Gowa, Tallok and Maros concurrently, giving him the single greatest area ever directly ruled by Gowa (Figure 13-10f).

The successful palace revolution initiated by Karaeng Kanjilo (later Sultan Abdullah) does not appear to have affected the extent of Gowa's Bate Salapang, but it restored Tallok's autonomy, and apparently the semi-autonomy of three areas previously ruled directly by Gowa - Galesong (Campagaya Lama), Pattekne and Maros (Figure 13-11g). As a complementary point, the loosened political bonds at home corresponded to greater Gowa's (Abdullah's) establishment of the maritime empire (Figure 4-5).

The notion of distinct geopolitical territories at home is, for the first time, mollified by the evidence of shared

authority. The point is suggested by the Gowa karaengships within the semi-autonomous regions,³⁴ and Somba Opu's

encirclement by Tallok karaengships. However, during the part of Alauddin's reign when he was based in Benteng Tua

(1618-1631), it would seem that Gowa had been returned to the status of a hinterland kingdom (Figure 13-11h). Not only was Makassar filled with Tallok karaengships, plus the

Lekokboding (Marusuk) karaengship of I Sambalik (LEK2), but also Abdullah had installed himself in nearby Bonto Alak

while keeping Benteng Tallok for his son, Mudhafar.

I suspect that the issue of Gowa's direct coastal access, which appears to have been a major stake in 16th century

politics, was still a cause for some tension between Gowa and Tallok. Resolution of the tension, and a fully mature

realisation by Gowa and Tallok of their inseparably shared interests, appears to have come with Gowa's establishment as

a truly coastal kingdom. Loosely covered by the reigns of Mohammad Said and Hasanuddin, the period (1631-1667)

witnessed Makassar's heyday as a great maritime city (Reid, 1987), extending more or less from Gowa's palace at the south

to Tallok's palace at the north (Figures 13-12i and 13-12j). The two kingdoms displayed a less proprietary attitude to

their political cores (not to say that the right to resume full control was ever abandoned). For instance, Gowa's Kg

Katinting established himself at Tallok during the period when Kg Pattinngalloang Sultan Mahmud was based at Bonto Alak,

and Tallok karaengships (Karunrung, Pakbiniang) directly abutted Benteng Tua during Hasanuddin's reign. The shared

Gowa-Tallok area, best depicted as the entrepôt during Alauddin's early reign (Figure 13-11g), is better thought of

as the land immediately backing the entrepôt during the mid-17th century.

³⁴ Although for the sake of simplicity I have depicted Gowa's Ujung Tana karaengship within Tallok's area, the marriages of this Kg Ujung Tana are unknown (Table 3-5), suggesting that he had been expelled from Tallok along with Tunipasuik. The inclusion of the Tabaringang karaengship within Campagaya Lama might also be misleading because she was presumably based in Sanrabone where she bore the king many offspring (three depicted in Figure 4-10). There is however no evidence of a return of the Moncong Sipong karaengship to Maros.

17th century relationships between Gowa and Tallok dramatically affected the level of political autonomy further south. Gowa's reduced territorial derring-do under Alauddin paved the way for local rule along the densely populated south coast, and the re-established Mandallek karaengship during Mohammad Said's reign can be seen in the same light. Nonetheless his reign also witnessed the first re-establishment of a greater Gowa karaengship along the south coast (Popok), followed during Hasanuddin's reign by the Mandallek, Galesong, Sanrabone and Lengkesek karaengships.³⁵ Greater Gowa's creeping rule southwards may well have placed the Turatea rulers in fear of losing their karaengships, and encouraged them to switch their allegiances to Speelman and Arung Palakka (Sahaduddin) during the 1667 siege of Makassar.³⁶

13.3.4 Political jurisdiction

In broad terms Figures 13-9 to 13-12 depict numerous karaengships but no or few Gelarang districts along the coast, and the reverse situation in the agricultural hinterland. Although not emphasised here, Gowa's immediate hinterland contained the highest density of karaengships. It also contained the highest density of Gelarang, including the two (Mangasa and Tombolok) whose title holders regularly acted as important decision makers. The scarcity of karaengships which can be plotted in post-conquest Maros, and the significance of the Tumailalang post for the Lekokbodong (Maros) lineage group (3.5.3), casts Maros in the same light as Gowa's Gelarang districts.

³⁵ Mandallek and Sanrabone might not be considered as good examples because Mandallek's entrustment to a Tallok noble was in direct anticipation of the Makassar War (4.5.2), and Abdul Jalil's installation at Sanrabone in 1668 can be interpreted as flight rather than political expansion (E.1.3). However, the Mandallek case reflects greater Gowa's capacity to assume direct authority by this juncture, while the Sanrabone throne had been left vacant since 1658.

³⁶ As reported by Andaya (1981), Turatea's change of heart was the crucial event which prompted greater Gowa to capitulate and sign the Bungaya Treaty. Note also that Kg Lengkesek secretly switched sides too, and his decision may well have been prompted by the vulnerability of his karaengship between Jipang and Turatea.

In gross terms the karaengships corresponded to control over labour, while Maros and the Gelarang districts corresponded to areas of agricultural surplus.³⁷ This distinction would imply that the south continued to be divided into karaengships either directly ruled by greater Gowa or ruled by friendly leaders, because its value lay in its population rather than its agricultural surplus. The very high 17th century population densities which I estimate along the coast, about twice the inland densities even though these were probably exaggerated by my survey procedure (13.3.2), support the distinction. The immediate hinterland would have acted as both a ready supply of manpower, and the belt of agricultural land closest to the city.

Note, however, that the distinction does not reflect a hard dichotomy. The Dutch sketches of Makassar emphasise its garden setting (Reid, 1983b); the south (Polombangkeng) was essentially a landscape of productive rice fields (e.g. Reid, 1983a:119); Maros may have been as densely populated as Polombangkeng (Figure 5-5); at its peak, Makassar had to import rice from overseas (Reid, 1987); and the great bulk of Makassar's potential manpower lived outside the city (13.3.2). Presumably the south coast was expected to provide its own subsistence needs, plus a surplus of seafoods; only the city of Makassar relied on tribute and trade to feed its people.

Hence the distinction should be rephrased. The areas with the highest density of karaengships, i.e. the land enclosed by the arc from Barombong to Benteng Tua and Benteng Tallok, supplied the most available pool of manpower, including war captives at particular intervals, slave labour and heavy corvée duties from the commoners more generally.³⁸ The south

³⁷ Hence the Makassar texts talk of the appointment of karaengs, or the populace "choosing" their new leader or being entrusted to a new Karaeng. The lands of Maros, on the other hand, were apparently divided among the Makassar lords by villages and lots following Tunjallok's conquest, at least according to Speelman (Reid, 1983a:119).

³⁸ Reid (1987; 1988:136) emphasises the importance of corvée labour as opposed to slave labour, which contrasts with Hasanuddin's use of huge numbers of Bugis slaves (see Andaya, 1981). We may speculate that Bugis-Makassar slaves were not exported from Makassar during its mid-17th century heyday precisely because their labour was required at home.

coast provided maybe the bulk of the Makassar engaged in trading seafoods or luxury items in the city, plus a pool of warriors who could be shipped up to defend Makassar or galvanised into action from their kampungs.³⁹ The inland areas and Maros probably combined an agricultural value with what may have been the largest, if least directly accessible, reservoir of manpower.

This description would be most appropriate for the mid-17th century when the various lineage groups had lost their territorial integrity, and when the kinship system served as a well-oiled apparatus for administering manpower. During the 16th century the stake appears to have been direct territorial conquest in search of both new land and new subjects.

At no stage is there any evidence of a register of lands, which appears to have been an administrative convention introduced by the Dutch (see Andaya, 1981). It was unnecessary because people were identified with the land where they lived, and so territorial karaengships (including the largest, the Gowa karaengship) represented rule over both. At the sorts of population densities described here, in the order of 1000 people/km², precise land-holding rights were probably a major concern of the villagers, sparing the administration from overt concern.⁴⁰ The system worked as a very precise way of dividing the social landscape and its occupants because of the high density of karaengships and, to a lesser degree, the Gelarang posts.

13.3.5 (Greater) Gowa's rise as a secondary state

As a result of the data presented in this thesis, I think that (greater) Gowa can be considered as a case of a state

³⁹ e.g. the attack by Lukmuk ri Mandallek on Bima (4.5.2), and the attention the Dutch gave to attacking the south coast.

⁴⁰ Indeed, SSPHAP's use of burial grounds as a reflection of population distribution worked because of the identification between people and their right as land holders - the right which in essence distinguished free commoners from slaves. True, there are considerable references to population movement in association with the described geopolitical changes (13.3.3), but this made the relocated populace the subjects of another karaengship.

TABLE 13-9. CHECKLIST OF (GREATER) GOWA'S ATTRIBUTES AS USUALLY ASSOCIATED WITH THE DEVELOPMENT OF EARLY STATES

Attribute	Reference	Date
Literacy*	Kluckhohn (see MacKnight, 1975)	Early 16th century
Towns of more than 5000 people (Benteng Tua)	"	14th century?, certainly 16th century
Monumental architecture*	"	Mid-16th century
Urban environment* (Gowa as described by Paliva)	Wheatley, 1983	Mid-16th century
Intensive agriculture (wet rice)	Fagan, 1989	13th-14th centuries
State sponsored irrigation works*	"	c.1600 (Abdullah)
Advanced military technology	"	Mid-16th century
Specialised trade (Kg Lolo Bayo)	"	13th-14th centuries
Specialised craftsmen* (3.5.4)	"	Mid-16th century
Large-scale warfare*	"	Early 16th century
State religion*	"	1605 (Islam)
Concentrations of wealth (east-west inhumations)	"	14th-15th centuries
Administrative posts*	"	Early 16th century
Hereditary social strata*	"	At least 1500
Geopolitical boundaries* Claessen, 1977		16th century
Political autonomy*	"	15th century
High population density* (500-1000 people per km ²)	"	14th century?, certainly 16th century
True capital city*	"	c.1550 (Makassar)
Stable capital city*	"	c.1550 (Makassar)
Existence of other towns*	"	c.1550 (Benteng Tua)
Extensive infrastructure*	"	c.1550 (brick walls)

TABLE 13-8. CHECKLIST OF (GREATER) GOWA'S ATTRIBUTES (CONT.)

Attribute	Reference	Date
Domain over 2460 km ² *	Spencer, 1987	1540 (Figure 13-9c)
Central administration*	" "	16th century
Delegation of authority in a pluralistic network*	" "	c.1600 (Kg Matoaya)
Coinage (Abdullah)*	Balmuth, 1975	Early 17th century
Standard weights and measures*	" "	Mid-16th century

* Indicates the more useful, specific criteria.

whose development and administration are very clear. Hence I do not see much point in reviewing the "negara", and "Asiatic Mode of Production" theories of Southeast Asian state formation (see Wisseman-Christie, 1986) - whatever they may describe, it is not Gowa.⁴¹ Views to the effect that southeast Asian societies lacked the true lineages necessary to institutionalise social stratification or to assure orderly succession (Bentley, 1986:290; Wolters, 1982:19-20), or that the early Southeast Asian states were special for having developed in the context of sparse population (Wolters, 1982:2-3; Wheatley, 1983:419; Bentley, 1986:290), can also be dismissed as irrelevant for Gowa. Friedman's (1979) model of asymmetric wife exchange would be inapplicable to the Makassar aristocracy. Gibson's (1990) model of "predatory island Southeast Asian states", and the usual model of long-distance trade as the factor which precipitated Southeast Asian states out of tribes (e.g. Fagan, 1989:446-448; Algaze, 1989:572-573), at least pass first muster, and so will be reviewed in the context of wider developments in the South Sulawesi lowlands (13.4.3).

⁴¹ Wisseman-Christie describes a third model, the so-called "mandala" model, based on the notion of states with well-defined centres but unfixed borders (see also Higham, 1989:239-240). I do not understand which early states would not be "mandalas". For instance, territorial expansion cannot occur if the borders are fixed beforehand.

Table 13-9 provides a checklist of the sorts of attributes usually associated with early states, and when they can be recognised in our case. The very general concepts (e.g. intensive agriculture) have origins which can be pushed back very early, but they are not as useful as the more specific criteria. Of these 18/22 (82%) were in place by the 16th century, and the remainder were established by the early 17th century. More theoretical criteria such as those which deal with the complexity of interrelations between the parts (see Fagan, 1989) are probably also better ascribed to Kg Matoaya's (Abdullah's) reign than to the mid-16th century. Hence greater Gowa by at least 1600 can be considered a full-fledged, secondary state.

Following Wisseman Christie (1990) rather than Cherry (1978) I retain the term "secondary state" because, clearly, Gowa did not go to the bother of reinventing administrative institutions and technological developments which were already available. For instance, to consider advances in military technology which were obviously crucial in Gowa's rapid expansion, we find that Tunipalangga introduced some innovations which could well be locally developed (reducing the size of the shields and shortening the spear shafts), but that others (placing cannons around forts, manufacturing Palembang bullets and making brick forts) must have been borrowed (see Andaya, 1981:25).⁴² Of course the adoption and integration of innovations into the social network reflect local sophistication and political skill, so Gowa's

description as a secondary state does not denigrate Gowa's achievements. And, most significantly, Makassar aristocratic organisation was not some imported version of the Javanese and Malay systems which it resembles, but rather the sophisticated adjustment of local kinship principles to the requirements of royal rule and territorial expansion (Chapters 3 and 4).

⁴² Note, however, that the manner in which the fortress walls usually combined lines of brick and packed earth would seem to be unusual, and represent the grafting of adopted technology onto the older technology of earthen walls.

13.4 A General Bugis-Makassar Perspective

13.4.1 The origins of the Bugis-Makassar kingdoms

All of the major and many of the minor Bugis-Makassar kingdoms were ruled by a royalty tracing its origins back to white-blooded Tomanurung, or descended ones (Maeda, 1986). Typically a Tomanurung couple was involved, although Gowa and Siang invoke the descent of a single, female Tomanurung. Another interesting variant, confined to the northern Bugis, derives the female Tomanurung from the underworld and the male from the upperworld. The Tomanurung couples sometimes originated from the same general locality and sometimes from distant places (Table 13-10; Figure 13-13). Northwest of the lower Walanae, in the cases coupling West Soppeng with Suppak and Bacukiki with Sidenreng, apparent historical rulers took on the Tomanurung aura when they started a royal line (Table 13-10). But otherwise the Tomanurung and even the first rulers tend to be seeped in mythological overtones, as is the case with Gowa (2.5.2).

Those kingdoms with a written genealogical succession include the Tomanurung in the genealogy, allowing us to estimate the kingdom's supposed antiquity. This can be done by starting with a dated ruler and dating back, either by an average reign length of 25 ± 17 years, or by an average male generation length of 30 ± 10 years (2.5.1).⁴³ The figures produce comparable estimates. For instance, one of the five sisters of the Soppeng king La Makkanengnga married the Cina prince La Panorangi as recorded in two quite independent genealogies (Caldwell, 1988). By backdating reign lengths, Caldwell, 1988:128-9,167) estimates c.1400-1425 for La Makkanengnga's reign and c.1430-1455 for La Panorangi's reign. If we use male generation length, the birth of Matinroe ri Salassakna in 1654 (Ligtvoet 1880:179) would indicate 1354 ± 10 for La Makkanengnga's birthyear, while Arung Palakka's birth in 1634 (LB:96) would indicate

⁴³ The slightly shorter reign length reflects the occasional succession of siblings (rather than descendants) to the throne.

TABLE 13-10. TYPES OF TOMANURUNG EVENTS AND THEIR DATES FROM WRITTEN GENEALOGICAL RECORDS

Kingdom	Tomanurung Event	Date	Sources
CINA	Simpurasia descended (in the Cenrana region) and married Da La Akko who ascended in Luwuk.	c.1200	Caldwell, 1988: 92, 98-9
LUWUK	Simpurasia descended from the upper world, married Patiajajala who arose from the foam of the waves, and became Luwuk's ruler. Their child married the granddaughter of the one who descended at Majapahit.	14th century (by association with Majapahit)	Caldwell, 1988: 42-4
MAJOK	La Matatikka descended at Buangkayang and married Lingekmanasa, daughter of she who had ascended at Sawitto.	c.1240	Noordyn, 1955: 155, Figures
AJATTA-PARRENG	La Bangengnge, who descended at and ruled Bacukiki, married We Tepulinge who ascended at Lawamparang and ruled Suppak (and Sidenreng in one story).	c.1440	Caldwell, 1988: 148, 153, 156-7
B. Other coupled Tomanurung			
SUPPAK/WEST	La Temmamala descended at Sekkanili and went to marry at Suppak with We Mappupu (Suppak's Tomanurung).	c.1285	Caldwell, 1988: 122, 128-9, 166
SOPPENG	East Soppeng's (female) Tomanurung, Manurungnge ri Gowaie, descended shortly after La Temmamala's descent	c.1285	Kalilupa et al., 1989: 11, 14
BONE	Mata Seliompoke appeared at Matajang and married the Tomanurung of Torok (both within four km of Watampone).	c.1353	Macknight and Mukhlis, in prep.
MAROS	Marriage of Tumanurunga ri Pasada (local Tomanurung) with Tumanurunga ri Luwuk (both Tomanurung unsexed).	c.1440	Figure 4-12
GOWA	Heavenly nymph descended at Tamalate and married Karaeng Bayo (apparently Sanrabone's Karaeng Lolo Bayo).	c.1300	Figure 2-2
SIANG	Female Tumanurunga ri Siang descended and became Kg Siang.	Undated	Pelras, 1977

TABLE 13-11. DATES FOR EARLY RULERS OF BUGIS-MAKASSAR KINGDOMS ESTIMABLE FROM WRITTEN RECORDS

TABLE 13-11. DATES FOR EARLIEST RULERS				Earliest backdated ruler		Sources	
Kingdom	Reign commencement details for rulers described in detail in a local text				Reign	Birth	
		Reign	Birth				
SANRABONE	Tumenanga ri Campagana	c.1566-90	c.1515	Karaeng Pancabelong	[c.1450]+	c.1425	Figure 4-10
GOWA	Tumapakrisik Kallona	1511-47	c.1485	Massalangga Barayang	[c.1330]+	c.1305	Figures 2-2 and 4-1; Table 2-2
TALLOK	Tunipasukruk	c.1525-47	c.1500	Karaengloe ri Sero	c.1475-1500	c.1455	Figure 4-8
MAROS	Karaengloe ri Pakerek	c.1470-1515	c.1450	Karaengloe ri Pakerek	c.1470-1515	c.1450	Figure 4-12.
AJATTA- PARRENG	Datu Suppak La Patebulu	By 1544	c.1475	La Bangengnge; We Tepulinge	[c.1440]	c.1415	Caldwell, 1988: 148,153-7
SUPPAK (WEST SOPPENG)	We Tekkewanua	c.1375-1400	c.1345	We Mapupu	[c.1280]	c.1255	Caldwell, 1988: 122,128-9,186; Kallupa et al., 1989
WEST SOPPENG	We Tekkewanua	c.1375-1400	c.1345	La Temmammala	[c.1280]		Caldwell, 1988: 122,128-9,186
EAST SOPPENG	La Makkaroda	Early 16th century		Manurungne ri Gowarie	[c.1280]		Kallupa et al., 1989:14
WAJOK	La Tanamparek	c.1495+	[c.1470]	La Palewo (1st Arung Matoa)	c.1420-45	c.1385	Noorduyn, 1955
BONE	La Saliu Kerrampeluak	c.1410-82	[c.1385]	Mata Sellompoké	c.1353-85	c.1353	Macknight and Mukhlis, in prep.
CINA	La Panorangi	c.1435-55	c.1394	La Sengngeng	c.1330-55	c.1274	Caldwell, 1988:98-9
LUWUK	Dewaraja	c.1500-25	[c.1475]	Tampobulusu	c.1425-50	c.1395	Caldwell, 1988:166

1394 + 10 for La Panorang's birth. Both methods indicate that La Makkangnga was a generation above his brother-in-law La Panorang. Harmony within the figures is easily achieved by using two standard deviations on La Makkangnga's birthyear to place it at c.1375, as used in Table 13-11.⁴⁴

The other important event in calibrating the early genealogical data concerns the alliance between Luwuk's Dewaraja and Wajok's La Tanamparek against Sidenreng, followed two years later by a battle between Dewaraja and Bone's La Tenrisukkik over the Cenrana delta (Noorduyn, 1955:195-201). The intersection of Dewaraja's estimated reign and La Tenrisukkik's reign dates their battle between 1512 and 1525 (Caldwell, 1988), or 1518 as an average. Since the event occurred near the 20th year of La Tanamparek's reign (Noorduyn, 1955:203), we can date the commencement of his reign to c.1500. The best estimate I have of La Tanamparek's birthyear comes from assuming he was 25 years old when he began his reign (cf. Table 2-3). I have done the same to jump between other estimated birthyears and commencements of reigns, as indicated by square brackets in Table 13-11. My chronological estimates for the earliest rulers for whom significant historical detail is available, and the earliest rulers recorded in the genealogies, are either taken directly from the sources given in Table 13-11, or are calculated from the genealogical diagrams given by the sources.⁴⁵ The

⁴⁴ The information from generation lengths also allows us to resolve discrepancies in backdating reigns. For instance West Soppeng's first ruler La Temmamala, and Suppak's first ruler We Mapupu, married and ruled together. But using reign lengths alone we would estimate La Temmamala's reign as 1300-1325, and We Mapupu's as 1275-1300, because their third generation descendant, We Tekkewanua (r.1375-1400), was West Soppeng's fourth ruler but Suppak's fifth. But including birth as 1255, allowing us to date the beginning of his reign (and We Mapupu's) to c.1280.
⁴⁵ Note that the earliest back-dated rulers in Table 13-10 exclude the incommensurable dates suggested for some earlier rulers of Cina and Luwuk. If we backdate by the Cina kinglist, the first person associated with Cina's (Pammana's) regalia, La Balaoni, would have ruled c.1280-1305, while Cina's first ruler Simpursia would have ruled c.1155-80 (cf. Caldwell, 1988:81-2). But following the Royal Genealogy of Cina we would estimate Simpursia's "birth" at c.1184 and

estimates are of course rubbery to the tune of decades, but the apparent antiquity of the various kingdoms varies in terms of centuries.

Let us first consider the earliest rulers for whom significant historical detail is available. West Soppeng's ruler, who then also ruled Suppak (Kallupa et al., 1989), is the earliest at 1375, preceding even Cina by 60 years. Their analogues in the adjacent Bugis kingdoms are terminal 15th to early 16th century figures, while those in the peninsula's southwest are primarily 16th century figures (Figure 13-13). Given that Caldwell (1988) dates the development of a Bugis script to c.1400 (2.1), we can even tentatively attribute the innovation to West Soppeng which then enjoyed coastal access via its port of Suppak. A comparable situation occurs in the peninsula's southwest, where the reigns of the first rulers for whom significant historical detail is available correspond to Gowa's apparent development of the Makassar script (2.1).

Let us now turn to the question of earliest rulers and Tomanurung events as they would be dated by the available genealogies. These often involve the same figures or parent-offspring relationships, although gaps of several generations between the Tomanurung and the earliest ruler also occur, as do inaugural rulers unrelated to Tomanurung, and Tomanurung without recorded early rulers (Tables 13-10 and 13-11).⁴⁶ If we temporarily skip over the question of

fail to find La Baloani. The same source identifies Simpursia's wife Da La Akko, and their daughter Bataritoja, as Luwuk's first two rulers (cf. Caldwell, 1988:92,98-9). Yet the Royal Genealogy of Luwuk claims Simpursia as Luwuk's first ruler with a reign that would be dated c.1375-1400 (cf. Caldwell, 1988:56). The association of Luwuk's mythological origins with Majapahit further confirms Luwuk's apparent claim for a 14th century origin (Table 14-9). Evidently both Cina and Luwuk claim the major mythological figure Simpursia as their inaugurator, with Cina's claim referring to an era approximately two centuries earlier than Luwuk's.

Note also that my estimates for Bone's 16th century and earlier rulers use the estimated 25-year average reign length for those reign lengths not specified in the chronicle.

⁴⁶ e.g. no known texts deal with East Soppeng whose first known ruler surfaces in the context of East Soppeng's unification with West Soppeng. The story of East Soppeng's Tomanurung is associated with the same event, so the two Soppeng Tomanurung are symbolically coupled. Archaeological

what the estimated dates actually mean for reconstructing history, what emerges is a striking parallel with the geographical pattern of earliest solid historical rulers. Claims for 13th century origins are restricted to the lower Walanae and the Cenrana, surrounded by claims for 14th-15th century origins in Luwuk and Bone, and with only one claim for an origin earlier than the 15th century along the west coast south of Suppak (Tables 13-10 and 13-11; Figure 13-13). Again the lower Walanae and the Cenrana stand out as the apparent hearth of Bugis-Makassar kingship.

Yet these kingdoms involved are conspicuously absent from the contemporary literature. The 14th century Javanese poem *Desawarnana* (Nagarakertagama) includes four identified South Sulawesi places in its list of Majapahit's "dependencies". Luwuk and Bantaeng are assigned to the same island of which Bantaeng was the principal place, while "Makassar" and Selayar are listed among the smaller islands in the eastern archipelago (Pigeaud, 1960:17), possibly indicating the route to the spice islands (Reid,

1983a:122,128). "Makassar" cannot be identified with any specific locality (11.8), but the context of the passage would locate it somewhere along or near the peninsula's south coast. The mention of Luwuk would have referred primarily to her role in exporting nickeliferous iron from the hinterland to Majapahit Java, although gold, slaves and forest produce were probably also part of the trade (Macknight, 1986:223; Caldwell, 1988:183-185). Bantaeng may have been Majapahit's principal "dependency" because of its strategic location on both trade routes.

Moreover, these locations show South Sulawesi's clearest evidence of Javanese influence. Not only do Luwuk's mythological origins invoke Majapahit (Table 13-10) but also Luwuk was unique in South Sulawesi for its use of Javanese-Sanskrit names to enhance the status of the elite (Caldwell, 1990). I am unaware of any local texts on Bantaeng or Selayar, but oral traditions and local venerated objects have strong references to Hindu Java (Reid, 1983a:123).

Furthermore the 19th century Dutch records describe a shivaistic Karaeng loe cult centred in Bantaeng and widespread along the south coast (Rössler 1987:74-75), and the toponym Sorobaya occurs twice along the south coast (Reid, 1983a:123). Moving west we have the written statement that Sanrabone's first king, Karaeng Pancabelong, originated from northern Majapahit (4.6), while Garassik and Jipang take their names from Majapahit ports. All these south coastal references come together in Gowa's first ruler, Massalangga Barayang, who supposedly could hear hair being cut in Java, smell a dead white buffalo in Selayar, and see a pigeon in Bantaeng (SG:10-11).

To summarise, we have two contrasting patterns for the origins of South Sulawesi kingdoms. One pattern concerns the coastal, trade-oriented kingdoms referred to in the Majapahit literature and showing the strongest evidence of Hindu-Javanese influences. The other concerns the agrarian Bugis kingdoms centred on the lower Walanae and the Cenrana where evidence of direct contacts with Majapahit Java is minimal. The latter, far from being a backwater, were apparently the first to use a local script,⁴⁷ and provide the earliest evidence of kingship in South Sulawesi.

13.4.2 Luwuk's place in South Sulawesi's early history

As noted by Caldwell (1988) we are still dealing with substantial kingdoms when the trail of Bugis history peters out. West Soppeng opens as a large agrarian polity which by the end of the 13th century ruled Suppak over 50 km away (Figure 13-12). Cina's status is harder to discern because the surrounding kingdoms had absorbed its associated territories by the 15th century. Possibly Cina had controlled the flow of goods into and from the Cenrana in prehistoric times before losing the strategic Cenrana delta to Luwuk in the 14th century. Afterwards Cina may have survived the rest of the century as a confederation of nascent agrarian

⁴⁷ Unfortunately, the specific relationship of the Sulawesi scripts to other Indic scripts in Java or Sumatra is probably irrecoverable, even though the general relationship is clear (Macknight, 1986).

chiefdoms in the western Cenrana region (Caldwell, 1988:207-211).⁴⁸

Caldwell (1988:190-191) is disappointed with the shallow chronology reconstructible for Luwuk because, as noted by Dutch commentators writing as early as 1759, local legend portrays Luwuk as the oldest Bugis-Makassar kingdom. But the textual evidence would not date Luwuk's rise to any prominence before the 14th century, and another explanation must be sought for Luwuk's supposedly great antiquity. There is considerable evidence that Luwuk's heyday was late but indeed spectacular. Luwuk's early 16th century vassal list includes ten places situated around the head of the gulf of Bone and 13 places strung along the south coast.⁴⁹ Yet at the height of its power Luwuk apparently also ruled much of the land between Bone and Bantaeng (Caldwell, 1988:190), while the origins of Maros are tied to Luwuk in a 15th century context (Figure 13-12). All this indicates that, during the late 15th century, Luwuk could claim its vassals and dependencies over a vast area which included the Gulf of Bone from the Cenrana northwards, the peninsula's southeast corner and south coast, and possibly Maros. The subsequent expansion of the two major 16th century kingdoms, Bone and especially Gowa, cut into this vast area. Before Bone and Gowa there was Luwuk, which in the simplified chronological frameworks which characterise legendary history wherein Luwuk is enshrined, places Luwuk in the Bugis-Makassar dreamtime.

Given the low population densities and poor potential for wet rice in Kabupaten Luwu, Luwuk's ambitions probably depended on mastering South Sulawesi's long distance trade.

⁴⁸ In this case, Luwuk's expropriation of Cina's traditional centre would parallel Luwuk's apparent usurpation of Cina's origin story.

⁴⁹ I date Luwuk's vassal list to the early 16th century because it mirrors a geopolitical situation which had apparently occurred during Dewaraja's early 16th century reign. The vassal list includes Sidenreng but nothing else between Luwuk and the south coast (Caldwell, 1988:79). Wajok had assisted Dewaraja's victory over Sidenreng, but in exchange for territory along the western Cenrana which Luwuk had previously superintended, and shortly afterwards Dewaraja lost the Cenrana delta to Bone (Caldwell, 1988:191-194). The implied early 16th century date for the Luwuk vassal list is acceptable to Caldwell on other criteria (pers. comm. 28-6-90).

presumably supported by a special relationship with the ports, along Java's north coast, aligned with Majapahit. Hence Luwuk apparently emerged, during the 15th century, as the first South Sulawesi kingdom to mount major military campaigns on a maritime rather than a terrestrial basis. Very significantly, Luwuk apparently did not conquer the two nearby areas which witnessed major agrarian expansions during the 15th century. One was Bone, which expanded across the coastal plain and foothills surrounding Watampone (Macknight, 1983). The other was Sidenreng which aligned with the small kingdoms to its west and pushed back West Soppeng south from the Tempe depression (Caldwell 1988). It may be no coincidence that Dewaraja's conflicts were with Sidenreng and Bone, or that the final demise of Majapahit as a source of authority in the late 15th century (Hall, 1985) was soon followed by Luwuk's own eclipse.

13.4.3 Implications for early state formation in Indonesia

A major theme in South Sulawesi's early history concerned well-populated agrarian polities, based on the rice bowls, dominating the small river mouth polities with direct access to long distance trade. Examples detailed in this thesis include Tallok's establishment when a displaced agrarian faction overran a suitable port (12.4), and the intense competition which followed to secure control over Garassik (4.3). Cases reviewed above include Bone's absorption of the Cenrana delta⁵⁰ and the establishment of the Ajattaparreng confederation in which the coastal members - Sawitto, Suppak and Bacukiki - were subservient with respect to the hinterland members Rappang and especially Sidenreng (Caldwell, 1988). These examples cover a small geographical scale compared to the earliest example which can be detected, West Soppeng's 13th-14th century rule over the port of Suppak 50 km away. In this context Luwuk's development as a significant maritime power was possible because it was isolated from the agrarian polities. Moreover Luwuk's

⁵⁰ Not to mention Bone's subsequent, long-running conflict with Wajok over this area (Macknight, 1983).

expansion, though dramatic, appears anomalous, specialised, late and, indeed, short-lived. According to Gibson's (1990) model of predatory island southeast Asian states, the area consisted of a mosaic of societies with very different levels of political power and highly varied economic skills. Consequently, political expansion and economic diversification were best achieved by direct political control (including slavery) over other societies' labour. The emphasis on political technique and violence account for the hybrid ideology which combined competitive social ranking with the ascription of mystical power to the ruler (Gibson, 1990). Most of these points do not hold in the Bugis-Makassar context. The changes in pre-Islamic burial traditions suggest that the expansion of wet rice, fostered by the superbly suitable conditions of the peninsula lowlands (1.2), had begun to marginalise collectors of forest produce and other small-scale societies to the cordilleras by the 13th-14th centuries. By this stage the lowlands supported agrarian polities often directly contiguous with the coastal trading and fishing polities, and at least the first trends towards hereditary strata (13.2). Continued expansion of the lands under intensive wet rice cultivation during the 15th century is suggested by SSPHAP's survey of the Tallok headwaters. More dramatically, MacKnight (1983) demonstrates that the 15th century expansion of Wajok and Bone was directly related to the realisation of those areas' agricultural potential. Within this cultural matrix the predators were generally the agrarian polities. Their texts commend particular rulers for their military accomplishments, others for the expansion of agricultural land, and yet others in both regards (Noorduy, 1955; ST; Caldwell, 1988; MacKnight and Mukhlis, in prep.). These were two sides of the same coin because local population increase was crucially important in offence and defence, and in control over strategic places such as the entrepôts. Hence protection was the dominant concern in political alliances (e.g. Andaya, 1981), and Gowa's marriage strategies which cemented the alliances were a double-edged ploughshare backed by the sword (see 4.12.2).

Pursuit of luxury goods and high-status items can be detected as far back as the archaeological record, which is fortunately supplied with an abundance of tradewares from the 13th-14th centuries, and the internal historical records allow us to go (e.g. Kallupa et al., 1989; Bulbeck, in press). The more agrarian polities may well have obtained large shares of the long-distance exchange items through trading agricultural surplus (Caldwell, 1988), but political domination provided less arduous access. Political domination of neighbouring polities appears to have been fostered by a social organisation which at any time entailed the strict hierarchy which ensured orders were obeyed, yet which also promoted initiative by rewarding achievement. As the system was in theory strictly hereditary, heredity was literally re-assessed through achievement and, especially, the rise of new apical aristocrats (Chapters 3 and 4).

Such an interpretation of the Bugis-Makassar kingdoms would be impossible but for the detailed internal records. Place ourselves in a comparable position to the historians interpreting the sketchy Indian and Chinese records, dating to the middle 1st millennium AD, on political developments in the western archipelago, i.e. Sumatra, Java and the Malay peninsula (see Wheatley, 1983 and Leong, 1990). If we had to rely on the *Deśawarnana* to interpret the first South Sulawesi kingdoms, we would infer four farflung coastal polities, none of much substance. Not only that, but the area we would place these earliest polities is mutually exclusive with the apparent hearth of Bugis-Makassar kingship. The total mismatch in the case of South Sulawesi may be an extreme example, but it certainly demonstrates how totally unreliable foreign records may be (as noted by Leong, 1990).

Yet so committed are historians to using foreign visitors as the track to complex polities that they misrepresent the cautionary tales. Thus when Paiva explains that the place he barely visited (Makassar) was a large city - a level of description he did not apply to Siang, where he stayed (see Jacobs, 1966) - then the slightest clue of a former victory by Siang is sufficient to ascribe Siang several centuries of

preceding suzerainty (Pelras, 1977; Villiers, 1990), despite all the contrary evidence (4.3).⁵¹

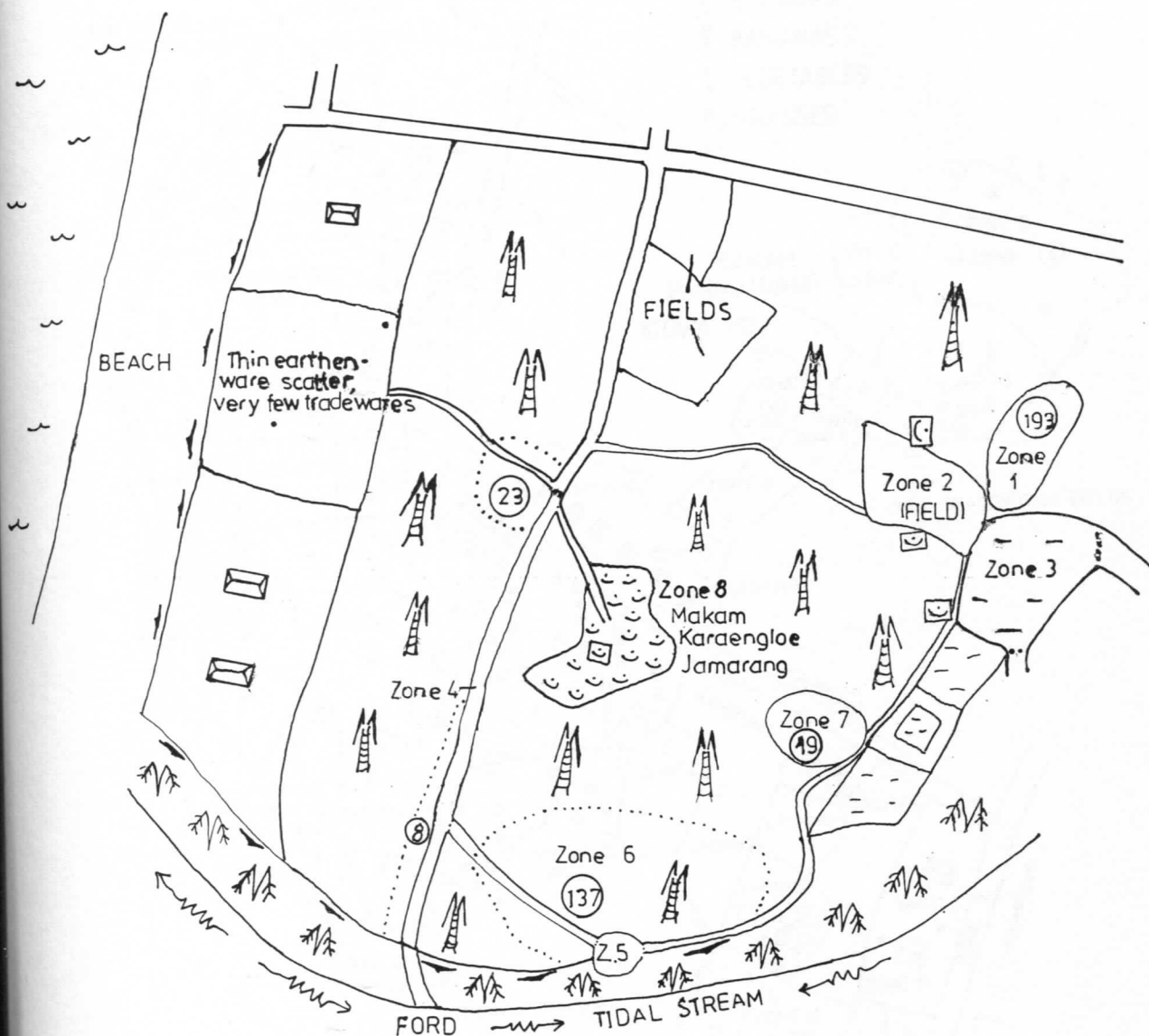
The archaeological evidence would probably have stood us in no better stead. In the South Sulawesi case, the enormous quantities of tradewares exhumed from graves in recent times cover the same area as the *Desawarāna* toponyms - "Makassar", Bantaeng, Selayar and Luwuk (13.2.2). Evidence that similar quantities were reaching hinterland stations is available primarily in the sherds scatters at historical sites (Kalilupa et al., 1989; Bulbeck, in press). But consider our likely interpretations if a much sparser range of non-perishable goods had been imported, as indeed was the case in the western archipelago during the 1st millennium AD. The scattering of relics along the coast would "confirm" the historical "evidence" of complex developments along the coast. The few stray inland finds could be interpreted as local trading links or even as coastal domination of the interior (cf. Hall, 1985:79-80; Bellwood, 1985:280-281; Leong, 1990:23; Rahman, 1990:41). And as the only identified cohesive groups include the foreign traders and other visitors, the apparent precipitation of "states" out of the anonymous matrix of "tribal societies" would naturally be ascribed to foreigners' direct influence (cf. Wolters, 1982; Fagan, 1989:572-573; Rahman, 1990:64).

As discussed by Wheatley (1983) and Hall (1985), limited epigraphic evidence of mid-1st millennium AD antiquity, recovered from the western archipelago, allows a partial improvement on the dreadfully simple models which would otherwise be available. Nonetheless these writers still trace the origins of local kingship to maritime trade and Indian influences. By analogy with South Sulawesi, this could well reflect the poverty of the internal sources. Ardika (1989; Ardika and Bellwood, 1991) has excavated the substantial entrepôt site of Sembiran in northeast Bali, recovering strong evidence of visitors by Indian traders at the very

⁵¹ As a further example of the potential uselessness of foreign records, even those as detailed as the 16th century Portuguese records on South Sulawesi, the first external references to Bone and Wajok date no earlier than the 17th century (see Pelras, 1977).

beginning of the 1st millennium AD. However, it has not been possible to correlate the site with coeval hinterland archaeological remains. Indeed, as pointed out by Miksic (1990), the main impediment to understanding the formation of island Southeast Asia's earliest states is the lack of evidence on settlement hierarchies. This information has become available for mainland Southeast Asia and indeed demonstrated the chronological precedence of large agrarian chiefdoms over their coastal maritime counterparts (Higham, 1989; Miksic, 1990).

As a result of its rich and accessible textual and archaeological records, South Sulawesi may be unique in the archipelago in the precision with which early agrarian developments can be traced and tied to the rise of Gowa, the peninsula's first true state. South Sulawesi in general presents itself as an obvious analogy for the early Javanese states. South Sulawesi's special case, Luwuk, looks like a suitable analogue for Srivijaya and the early port-polities along the Malay peninsula. In that case these early Malay kingdoms might have flourished largely because of their isolation from more densely populated, agrarian areas. We may never enjoy detail of the same scale for the first states of the western archipelago, but until archaeologists working in the region learn to recognise the coeval settlement hierarchies, the agrarian sector, probably co-dominant and possibly even dominant, will remain anonymous.



- ⊗ NUMBER OF COUNTED LOOTER'S HOLES
- ☐ SHELTERED EAST-WEST GRAVE
- ☐ SHELTERED NORTH-SOUTH GRAVE
- EMPANG
- WELL
- 🎋 BAMBOOS
- 🌴 NIPA PALMS

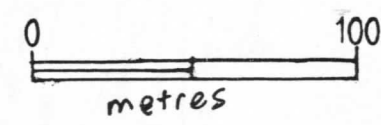


FIGURE 13-1. JAMARANG TUA

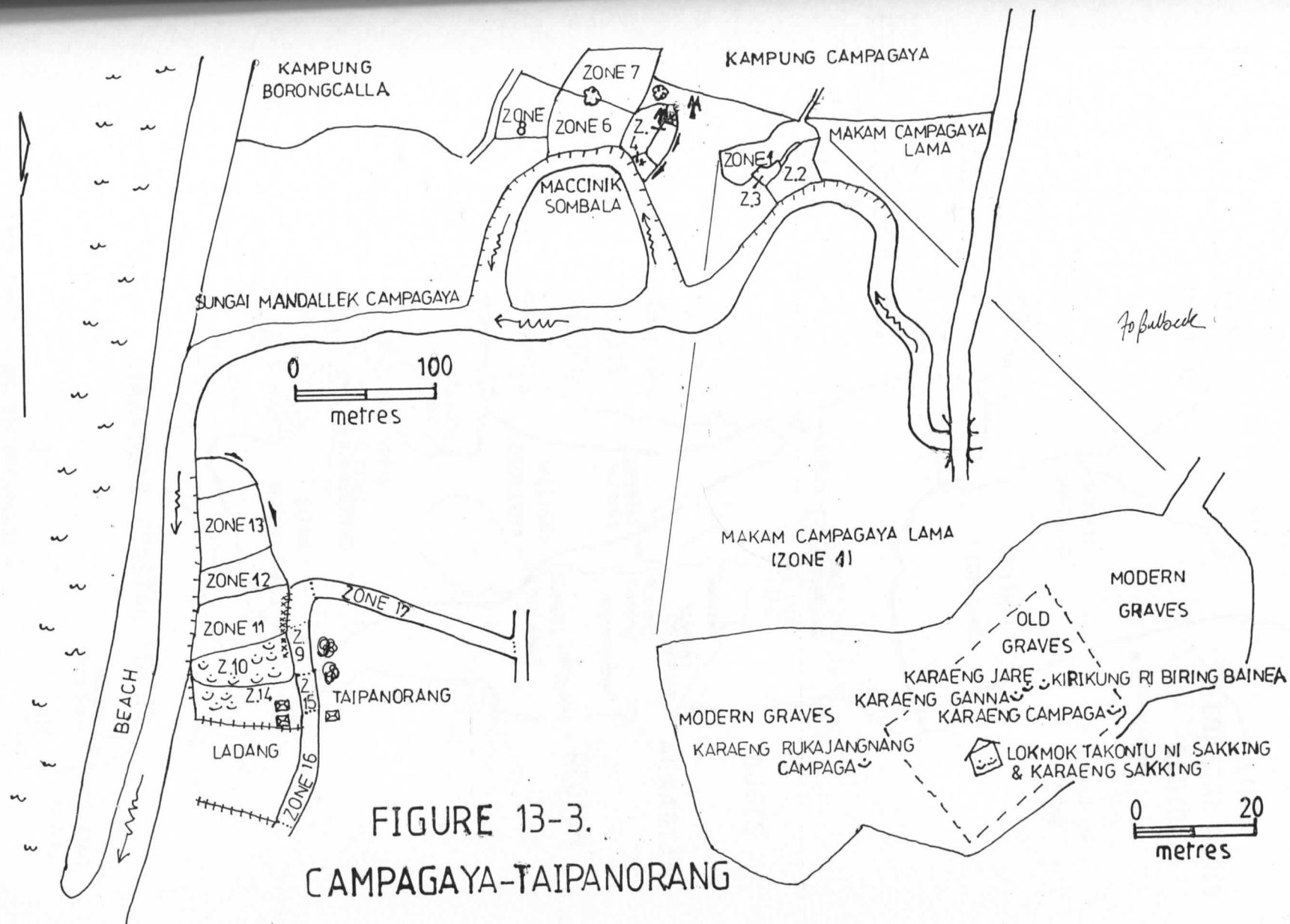


FIGURE 13-3.
CAMPAGAYA-TAIPANORANG

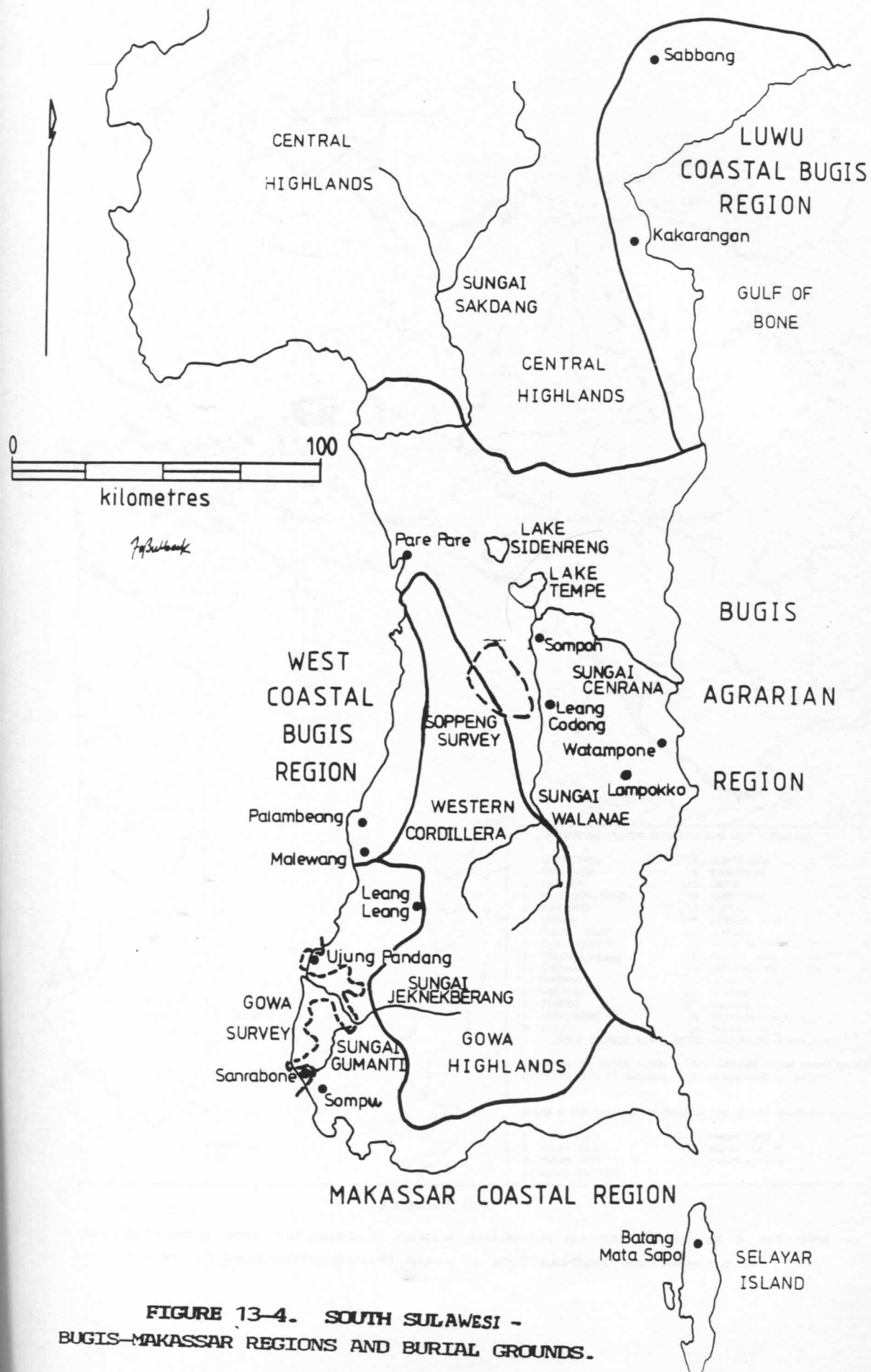


FIGURE 13-4. SOUTH SULAWESI -
BUGIS-MAKASSAR REGIONS AND BURIAL GROUNDS.

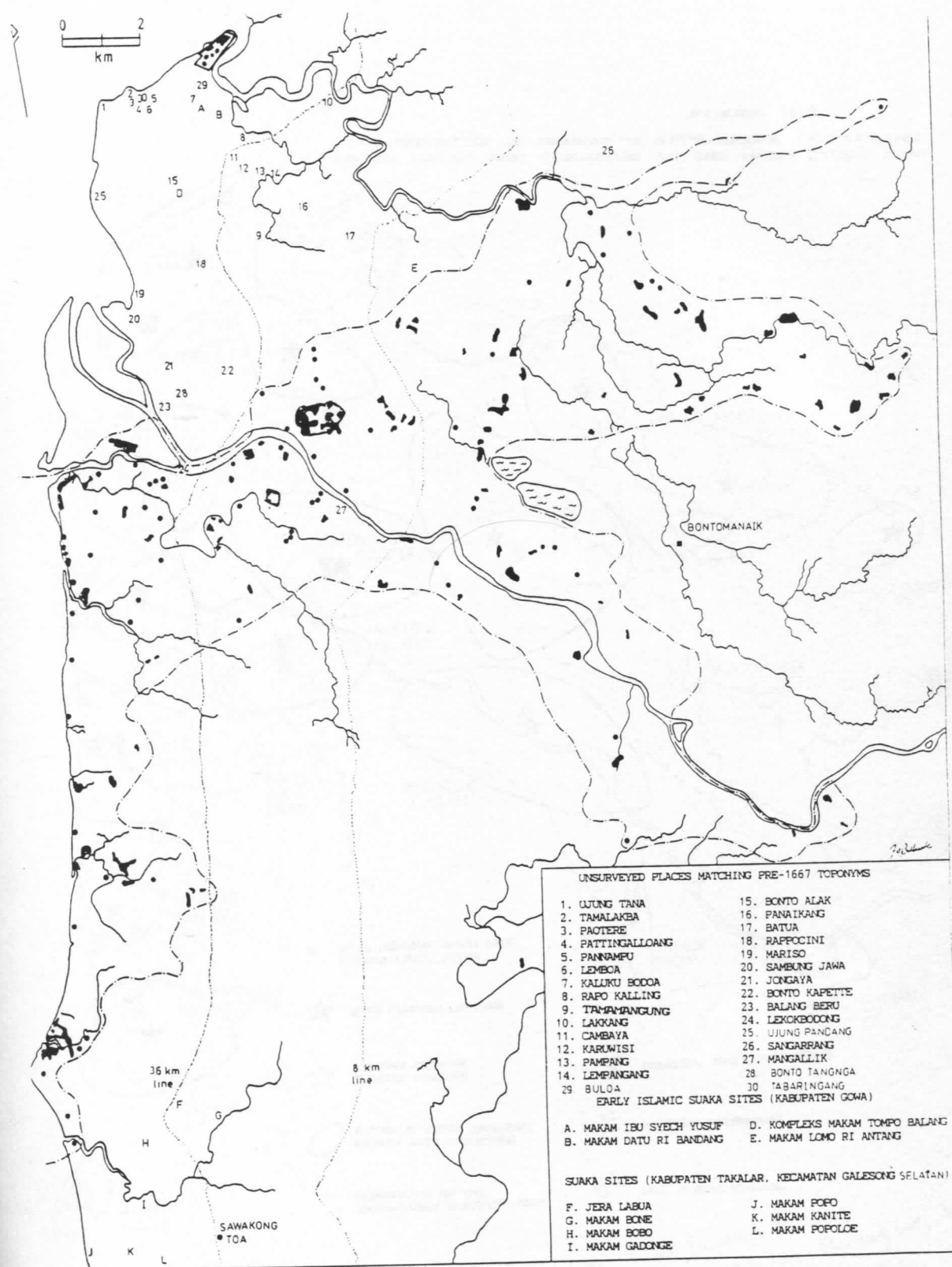
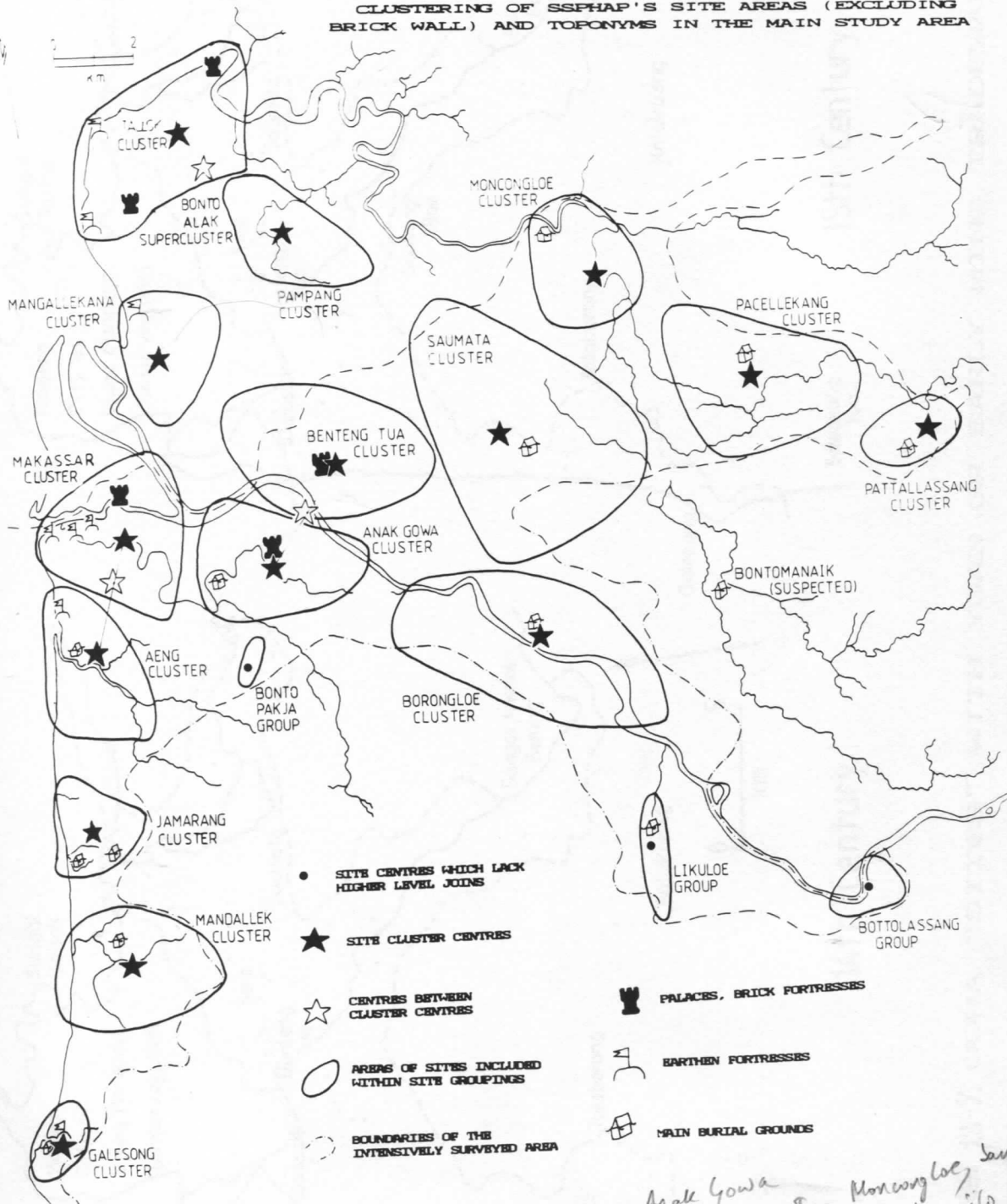


FIGURE 13-5.

IMMEDIATELY PRE-ISLAMIC & EARLY ISLAMIC SITES - AREAS & POINTS -
USED IN RECONSTRUCTING GOWA'S SETTLEMENT HIERARCHIES

FIGURE 13-6.

CLUSTERING OF SSPHAP'S SITE AREAS (EXCLUDING BRICK WALL) AND TOPONYMS IN THE MAIN STUDY AREA



Palaces - Kale Gowa, Somba Opu, Anak Gowa, Pattallassang, Bontotua, Moncongloe, Samata, Aengton, Boronglor, Bontolawisa, Kanjilo, Aengton, Jamarang, Bontolabang, Mandallek, Campagaya Ma, Galesong, earth forts - Garassik, Bayan 1, Paknokkukang, Baranbong, low level - everything else

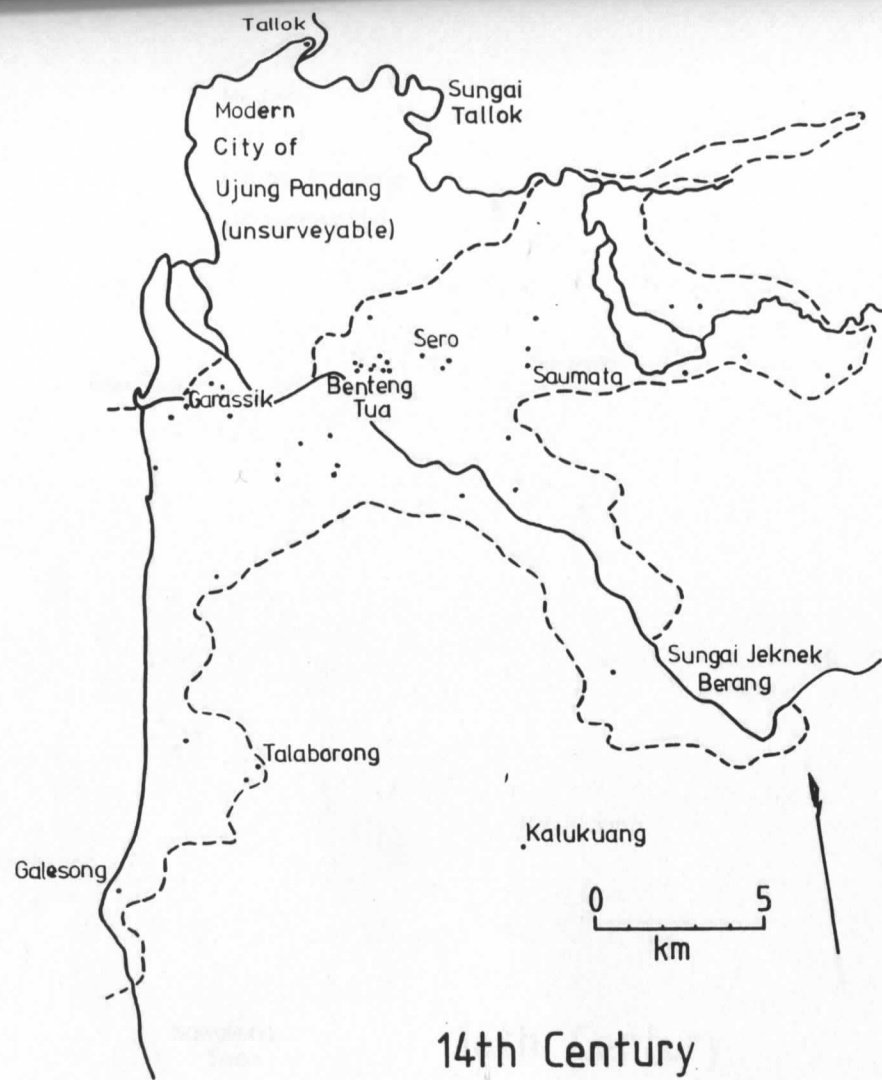
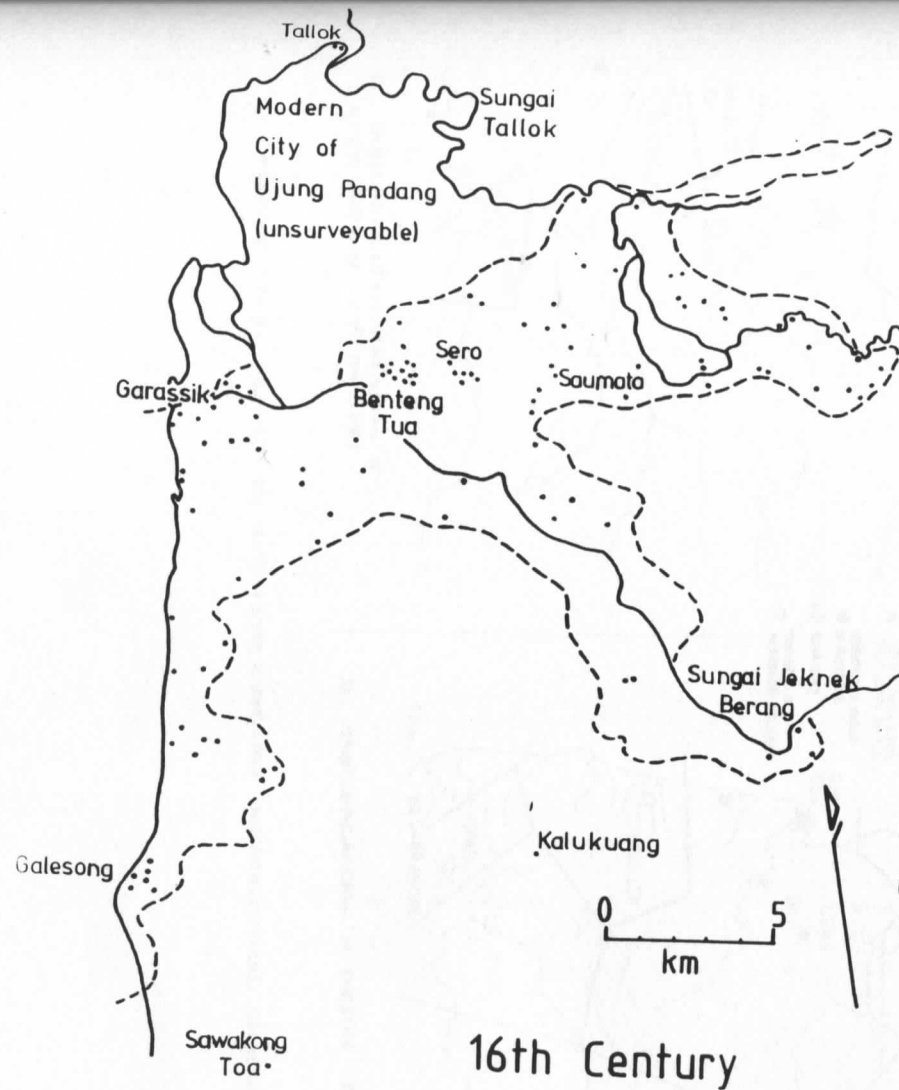
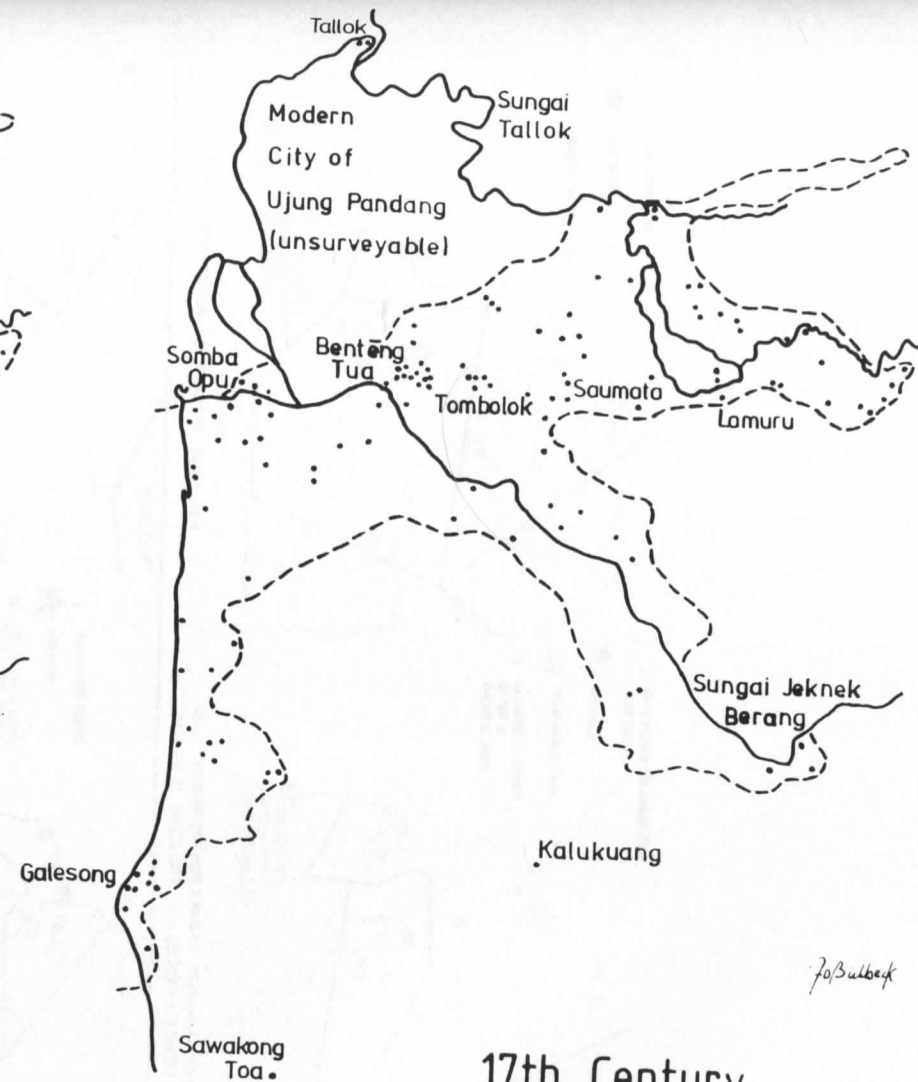


FIGURE 13-7. GOWA "SITES" WITH YUAN OR EARLY MING TRADEWARES

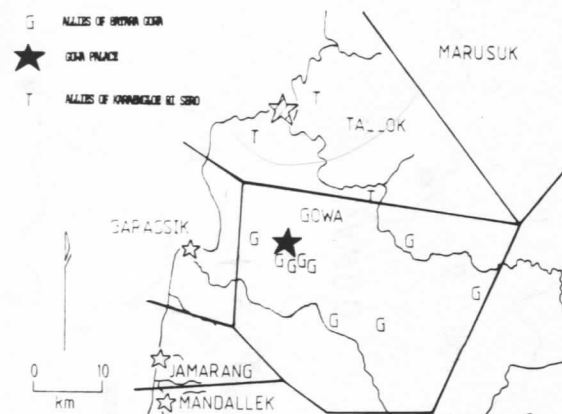


16th Century

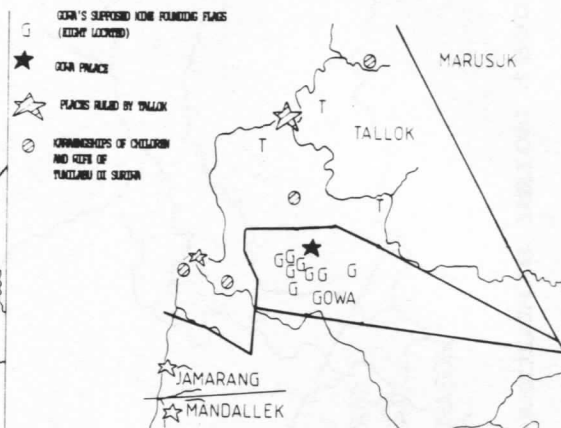


17th Century

FIGURE 13-8. GOWA "SITES" WITH MIDDLE TO LATE MING TRADEWARES



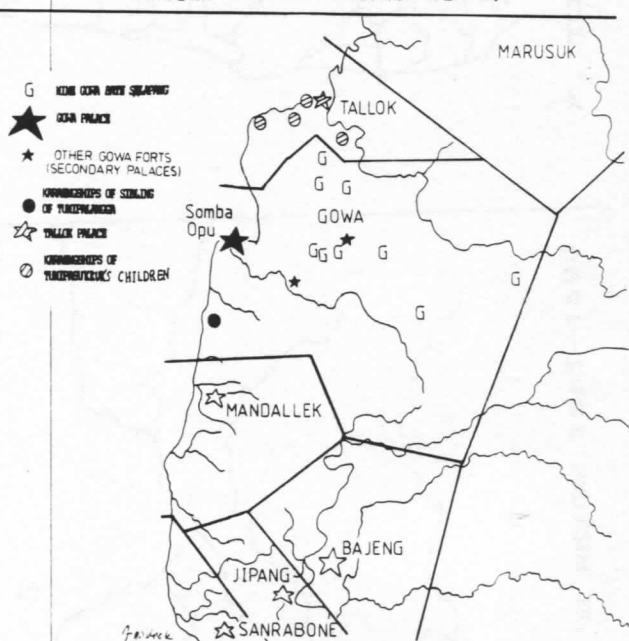
A. BATARA GOWA'S REIGN



B. TUMAPAKRISIK KALLONA'S
MIDDLE REIGN (c.1520-c.1540)



C. TUMAPAKRISIK KALLONA'S
LATER REIGN (c.1540-1547)

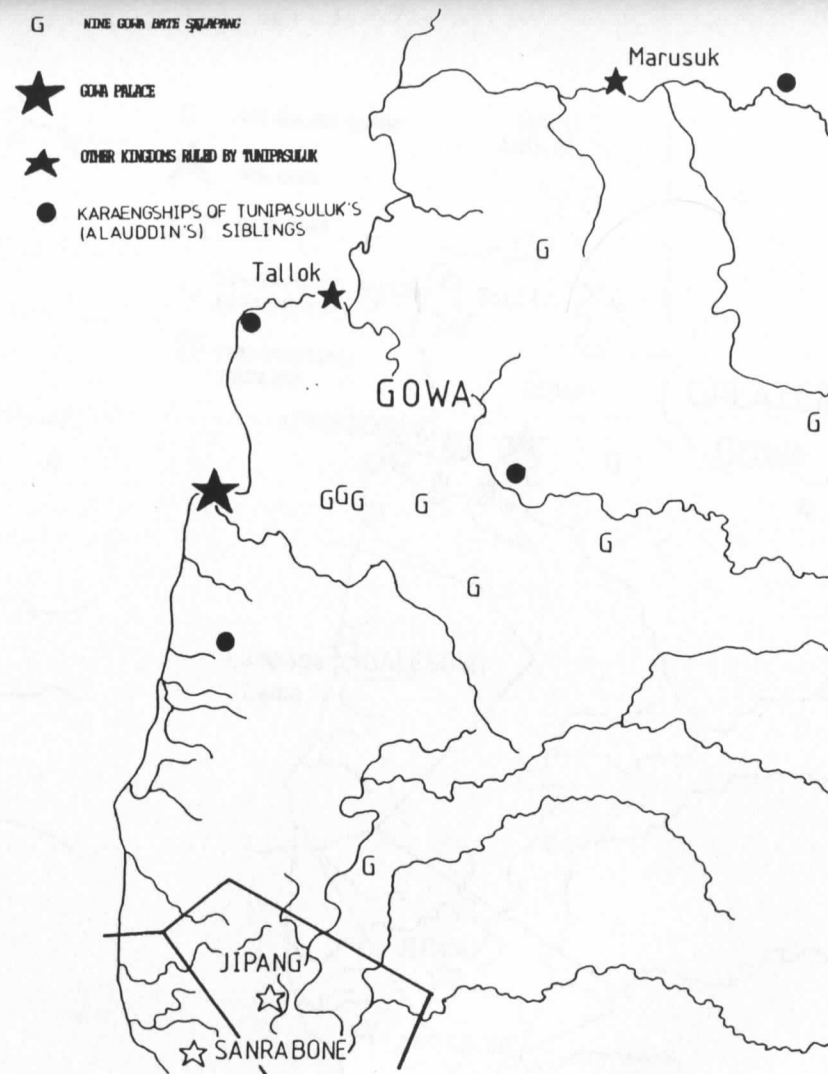


D. TUNIPALANGGA'S REIGN 1547-1563

FIGURE 13-9. EARLY TO MID-16TH CENTURY GEOPOLITICAL CHANGES.

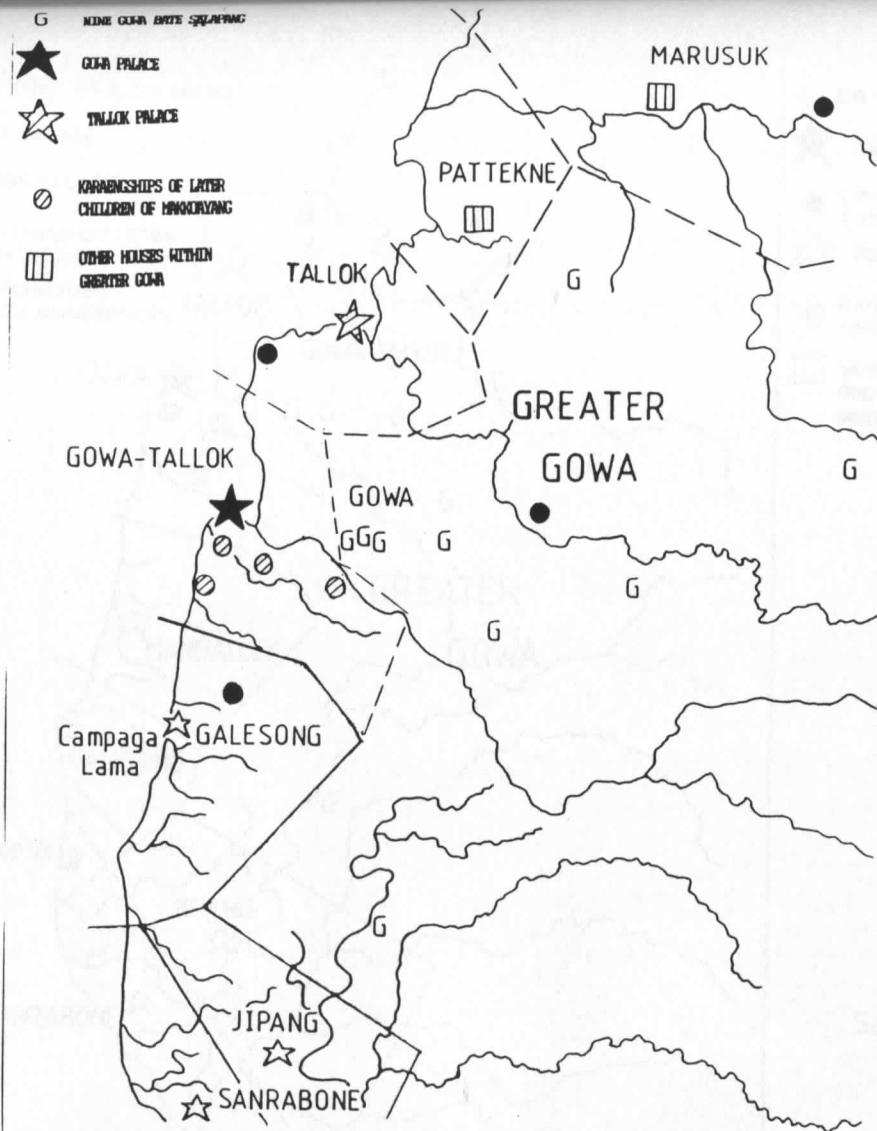


E. TUNIJALLOK'S REIGN 1565-1590

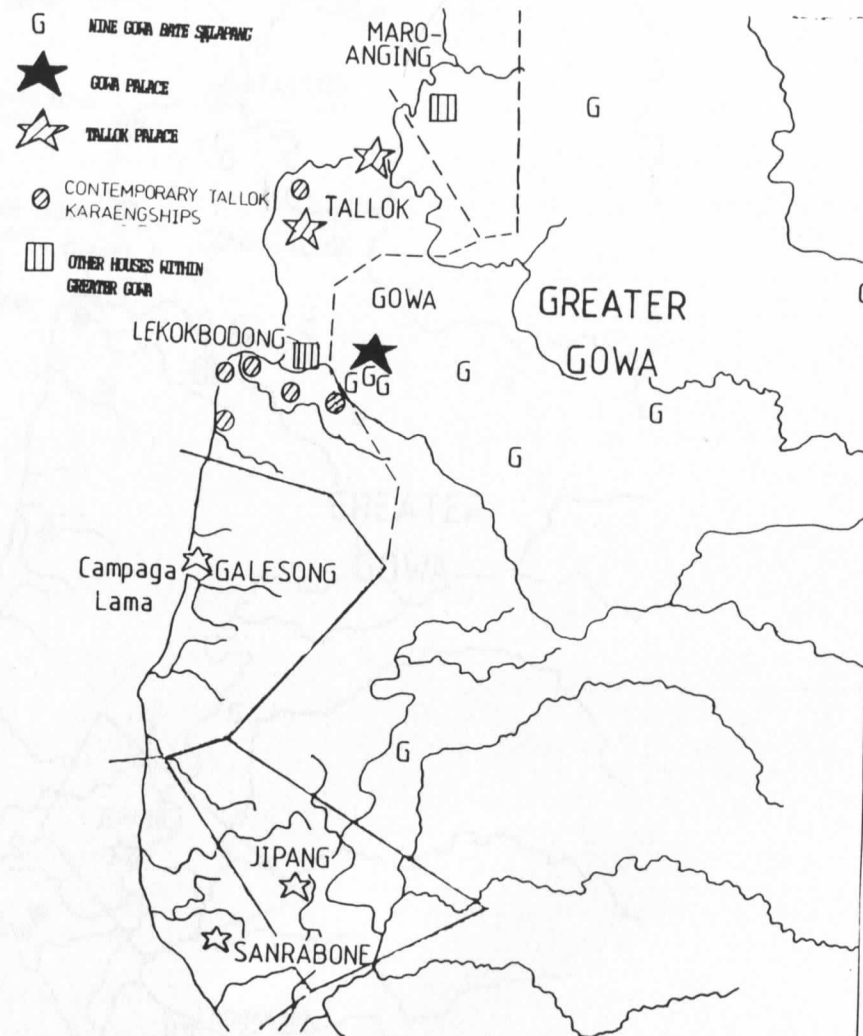


F. TUNIPASULUK'S REIGN 1590-1593

FIGURE 13-10. LATE 16TH CENTURY GEOPOLITICAL CHANGES

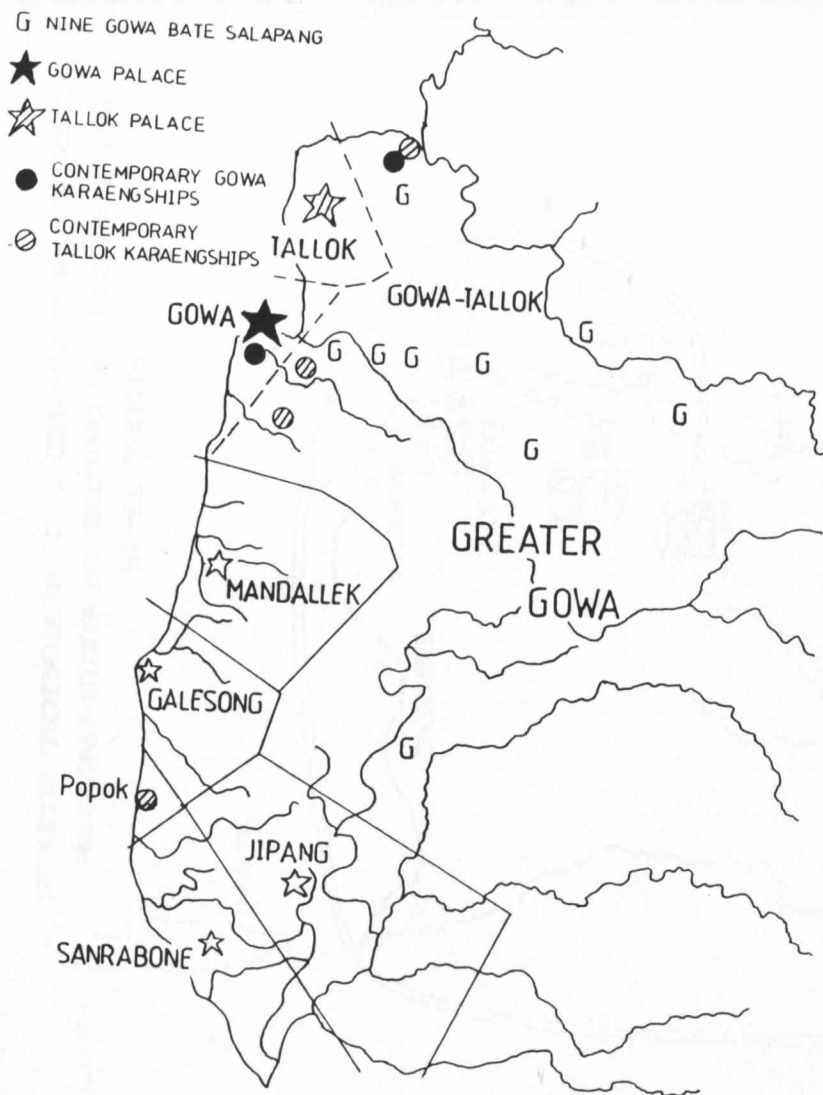


G. ALAUDDIN'S EARLY REIGN 1593-1618

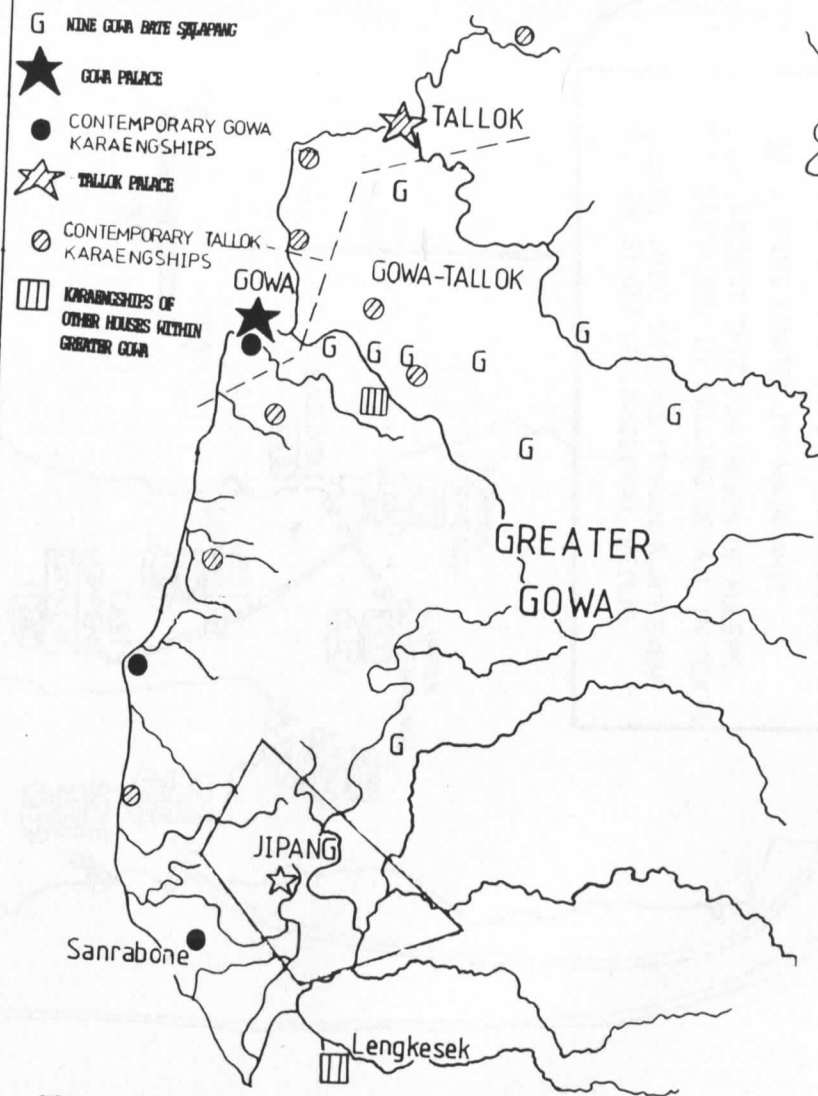


H. ALAUDDIN'S LATER REIGN 1618-1639

FIGURE 13-11. EARLY 17TH CENTURY GEOPOLITICAL CHANGES



I. MOHAMMAD SAID'S REIGN 1639-1653



J. HASANUDDIN'S REIGN 1653-1669

FIGURE 13-12. MIDDLE 17TH CENTURY GEOPOLITICAL CHANGES

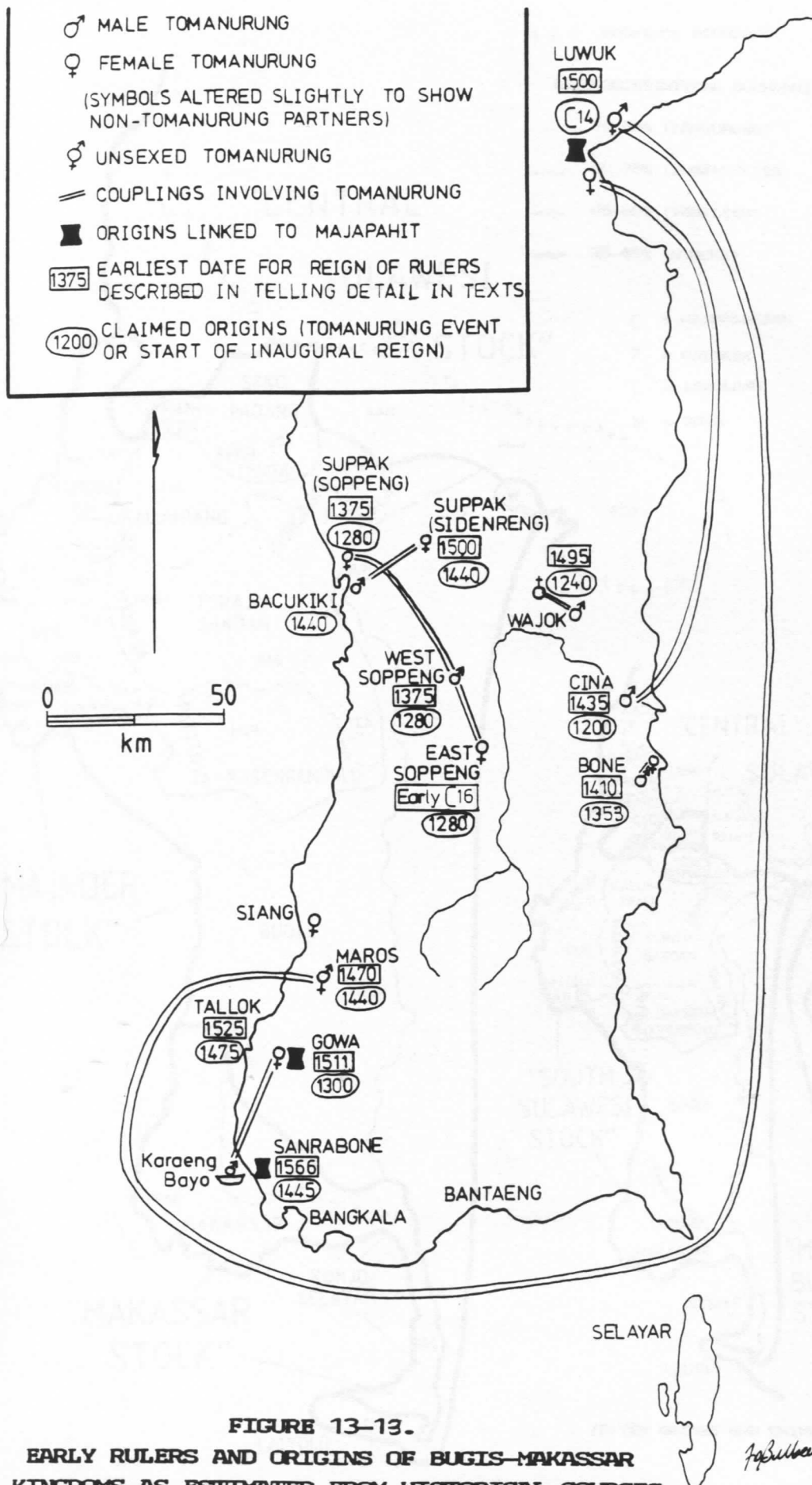


Photo 13-3.
The exposure of the duni at Bayoa, Sanrabone, from where the
sample of wood for radiocarbon dating was taken.

Photo 13-1.
The duni (wooden coffin)
from Bayoa, Galesong,
photographed behind the office
of the Department of Culture
and Education, Kota Galesong.

Photo 13-2.
The duni (wooden coffin)
from Bayoa, Sanrabone,
photographed after its
excavation by Suaka.



Photo 13-6: detached humerus head top left;
two non-human fragments of bone, bottom left;
three fragments of posterior neurocranium, showing the
unclosed sagittal and lambdoid sutures, at right.

Photo 13-5: clavicle, ulna, radius, rib, metatarsal, distal
humerus, and vertebral fragments.
Photo 13-4: two pairs of matching femora, representing a
female or sub-adult at the top and an adult male below.

Human bone observed in the office of the Department of
Culture and Education, Kota Galesong.

Photos 13-4 to 13-6.

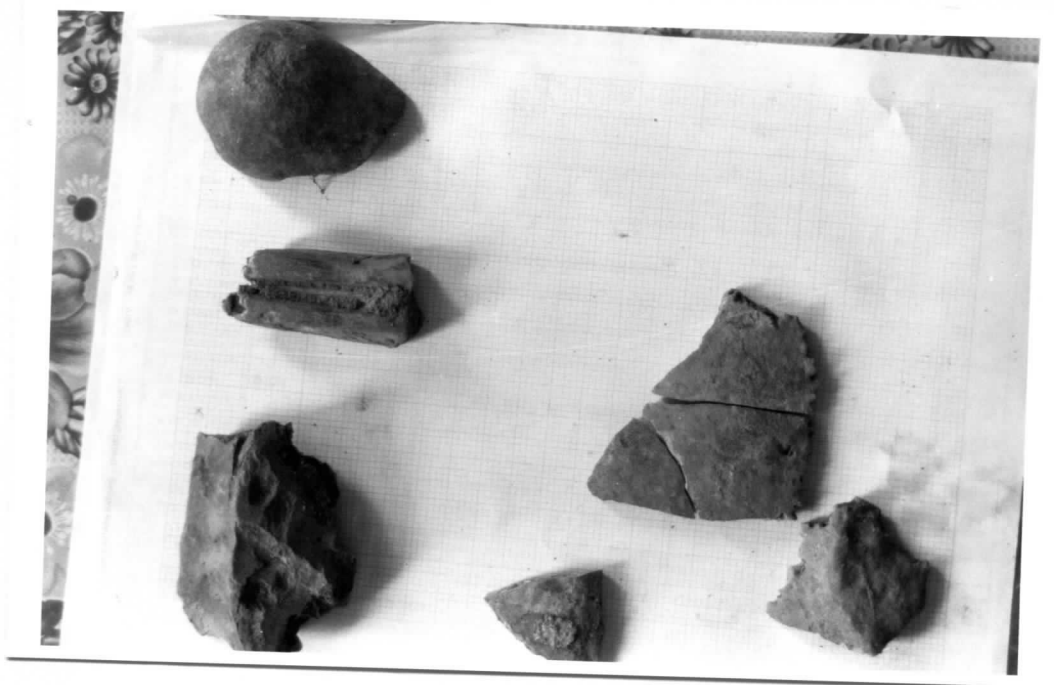
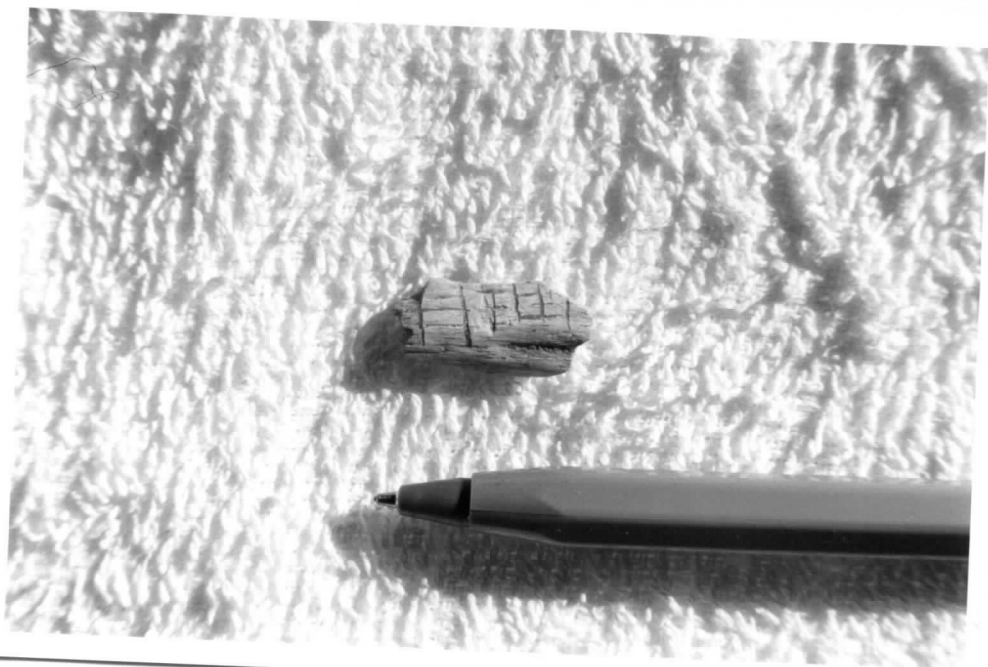


Photo 13-9.
G.24.2.1, a possible radius fragment from Talaborong, showing
apparent warping which indicates cremation in the flesh.

Photo 13-8.
The fragment of arm bone from Talaborong, G.24.2.24,
showing transverse fracture lines which indicate
cremation in the flesh.

Photo 13-7.
The sheltered grave, further protected/a locked gate, of
Karaeng Lolo Bayo, Bayoa, Benteng Sanrabone.
by



Photos 13-10 to 13-12.
The possibly 15th century tradeware pieces from
mainland Southeast Asia, reportedly recovered along with the
human bones and duni at Bayoa, Galesong. Three separate
Swankhalok underglaze-iron covered bowls, and sherds from a
Vietnamese blue-and-white jarlet in Photo 13-12.

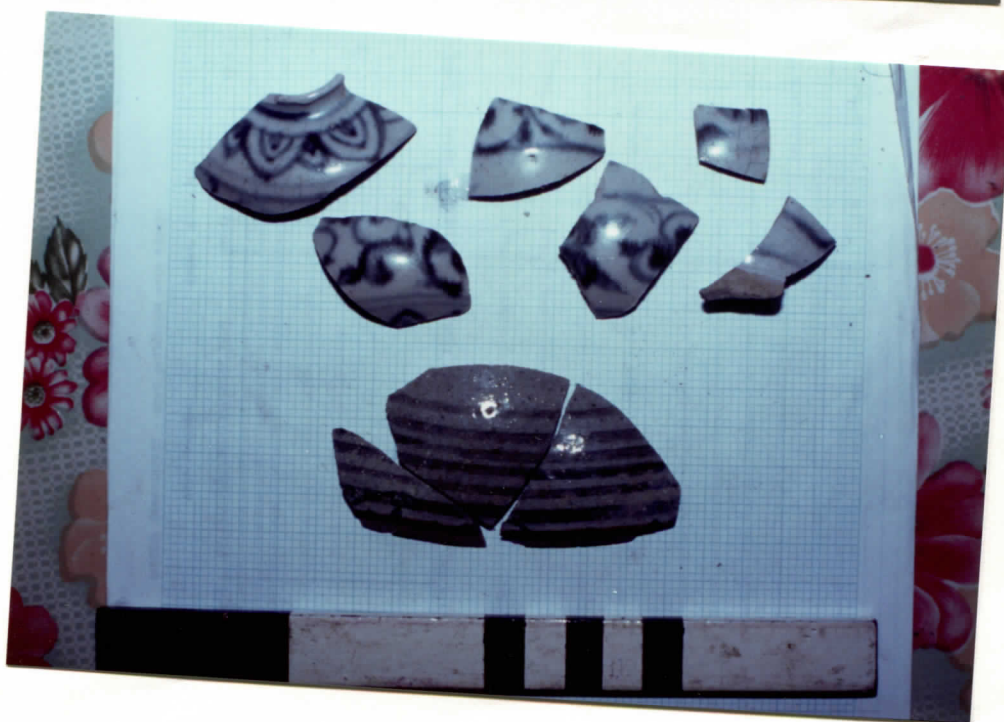
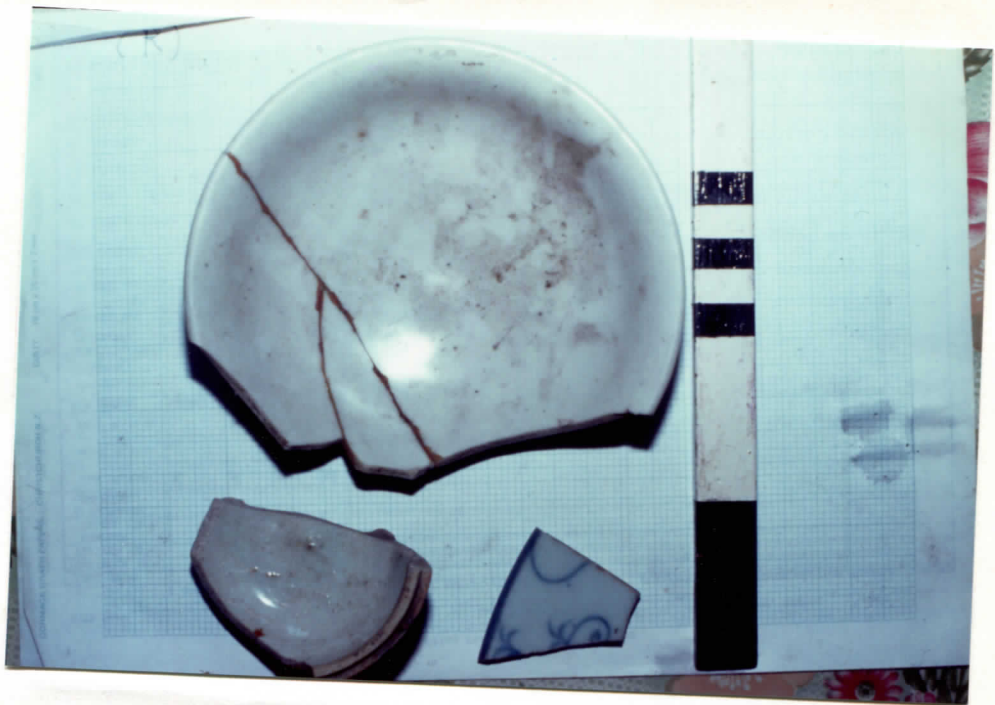


Photo 13-13.
16th-18th century Chinese tradewares reportedly recovered
along with the human bones and duni at Bayoa, Galesong.
Top: Wanli BW plate (reverse base has a Chinese character).
Bottom left: Late Ming BW base to a covered bowl (emblem of
one of the Eight Immortals on reverse).
Bottom right: (early?) Qing BW fragment.

Photo 13-15.
Qingbai bowl with thickened rim, G.24.1.6, Talaborong.
Datable to the Song dynasty, cf. Lam, 1985 (5).

Photo 13-16.
Early monochrome pieces from Talaborong, Gowa 24.



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